



**RS TOOLS**

DESEMPENHO E ESTABILIDADE

| CATÁLOGO DE FRESAS |

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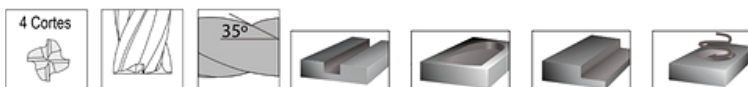
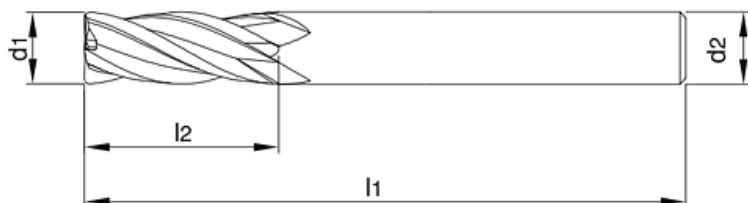
- |           |  |
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# Fresa Topo Reto Standard 4 Cortes

65  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiSiN



| Código            | d1  | l2 | d2 | l1  | Z |
|-------------------|-----|----|----|-----|---|
| RS65.03008030504F | 3   | 8  | 3  | 50  | 4 |
| RS65.01003040504F | 1   | 3  | 4  | 50  | 4 |
| RS65.01504040504F | 1.5 | 4  | 4  | 50  | 4 |
| RS65.02006040504F | 2   | 6  | 4  | 50  | 4 |
| RS65.02507040504F | 2.5 | 7  | 4  | 50  | 4 |
| RS65.03008040504F | 3   | 8  | 4  | 50  | 4 |
| RS65.04010040504F | 4   | 10 | 4  | 50  | 4 |
| RS65.05013050504F | 5   | 13 | 5  | 50  | 4 |
| RS65.05013060504F | 5   | 13 | 6  | 50  | 4 |
| RS65.06015060504F | 6   | 15 | 6  | 50  | 4 |
| RS65.07018080604F | 7   | 18 | 8  | 60  | 4 |
| RS65.08020080604F | 8   | 20 | 8  | 60  | 4 |
| RS65.10025100754F | 10  | 25 | 10 | 75  | 4 |
| RS65.12030120754F | 12  | 30 | 12 | 75  | 4 |
| RS65.14035140804F | 14  | 35 | 14 | 80  | 4 |
| RS65.14045141004F | 14  | 45 | 14 | 100 | 4 |
| RS65.16045161004F | 16  | 45 | 16 | 100 | 4 |
| RS65.18045181004F | 18  | 45 | 18 | 100 | 4 |
| RS65.20045201004F | 20  | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

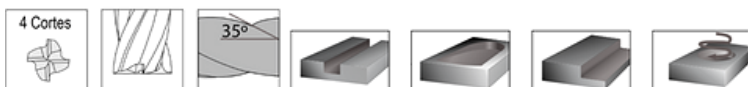
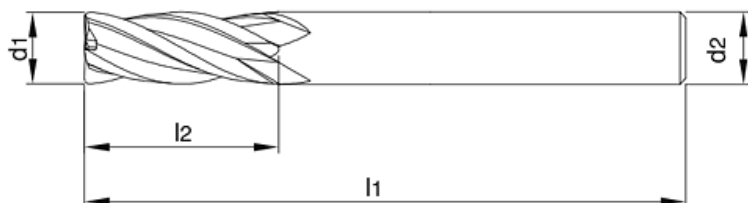
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Longa 4 Cortes

65  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiSiN



| Código            | d1 | l2 | d2 | l1  | Z |
|-------------------|----|----|----|-----|---|
| RS65.04016040754F | 4  | 16 | 4  | 75  | 4 |
| RS65.04020041004F | 4  | 20 | 4  | 100 | 4 |
| RS65.05020050754F | 5  | 20 | 5  | 75  | 4 |
| RS65.05025051004F | 5  | 25 | 5  | 100 | 4 |
| RS65.06020060754F | 6  | 20 | 6  | 75  | 4 |
| RS65.06030061004F | 6  | 30 | 6  | 100 | 4 |
| RS65.06040061504F | 6  | 40 | 6  | 150 | 4 |
| RS65.08025080754F | 8  | 25 | 8  | 75  | 4 |
| RS65.08035081004F | 8  | 35 | 8  | 100 | 4 |
| RS65.08050081504F | 8  | 50 | 8  | 150 | 4 |
| RS65.10040101004F | 10 | 40 | 10 | 100 | 4 |
| RS65.10050101504F | 10 | 50 | 10 | 150 | 4 |
| RS65.12045121004F | 12 | 45 | 12 | 100 | 4 |
| RS65.12055121504F | 12 | 55 | 12 | 150 | 4 |
| RS65.14060141504F | 14 | 60 | 14 | 150 | 4 |
| RS65.16060161504F | 16 | 60 | 16 | 150 | 4 |
| RS65.18060181504F | 18 | 60 | 18 | 150 | 4 |
| RS65.20070201504F | 20 | 70 | 20 | 150 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

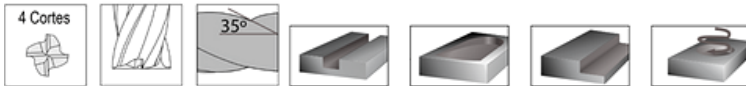
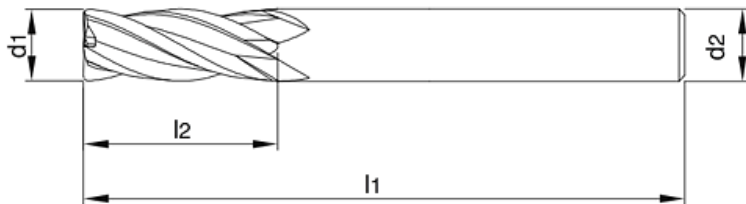
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

## Fresa Topo Reto Standard 4 Cortes

**60**  
HRC

Ângulo de  
Hélice  
**35**

Revestimento  
**AlTiSiN**



| Código            | d1  | l2 | d2 | l1  | Z |
|-------------------|-----|----|----|-----|---|
| RS60.03008030504F | 3   | 8  | 3  | 50  | 4 |
| RS60.01003040504F | 1   | 3  | 4  | 50  | 4 |
| RS60.01504040504F | 1.5 | 4  | 4  | 50  | 4 |
| RS60.02006040504F | 2   | 6  | 4  | 50  | 4 |
| RS60.02507040504F | 2.5 | 7  | 4  | 50  | 4 |
| RS60.03008040504F | 3   | 8  | 4  | 50  | 4 |
| RS60.04010040504F | 4   | 10 | 4  | 50  | 4 |
| RS60.05013050504F | 5   | 13 | 5  | 50  | 4 |
| RS60.05013060504F | 5   | 13 | 6  | 50  | 4 |
| RS60.06015060504F | 6   | 15 | 6  | 50  | 4 |
| RS60.07018080604F | 7   | 18 | 8  | 60  | 4 |
| RS60.08020080604F | 8   | 20 | 8  | 60  | 4 |
| RS60.10025100754F | 10  | 25 | 10 | 75  | 4 |
| RS60.12030120754F | 12  | 30 | 12 | 75  | 4 |
| RS60.14035140804F | 14  | 35 | 14 | 80  | 4 |
| RS60.14045141004F | 14  | 45 | 14 | 100 | 4 |
| RS60.16045161004F | 16  | 45 | 16 | 100 | 4 |
| RS60.18045181004F | 18  | 45 | 18 | 100 | 4 |
| RS60.20045201004F | 20  | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

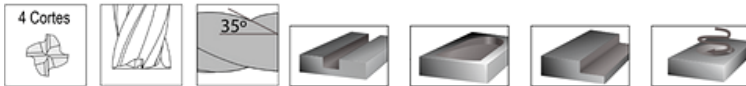
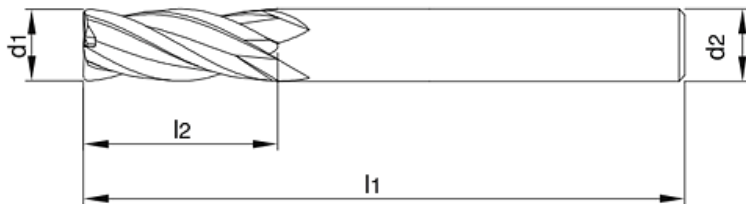
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

## Fresa Topo Reto Longa 4 Cortes

**60**  
HRC

Ângulo de  
Hélice  
**35**

Revestimento  
**AlTiSiN**



| Código            | d1 | l2 | d2 | l1  | Z |
|-------------------|----|----|----|-----|---|
| RS60.04016040754F | 4  | 16 | 4  | 75  | 4 |
| RS60.04020041004F | 4  | 20 | 4  | 100 | 4 |
| RS60.05020050754F | 5  | 20 | 5  | 75  | 4 |
| RS60.05025051004F | 5  | 25 | 5  | 100 | 4 |
| RS60.06020060754F | 6  | 20 | 6  | 75  | 4 |
| RS60.06030061004F | 6  | 30 | 6  | 100 | 4 |
| RS60.06040061504F | 6  | 40 | 6  | 150 | 4 |
| RS60.08025080754F | 8  | 25 | 8  | 75  | 4 |
| RS60.08035081004F | 8  | 35 | 8  | 100 | 4 |
| RS60.08050081504F | 8  | 50 | 8  | 150 | 4 |
| RS60.10040101004F | 10 | 40 | 10 | 100 | 4 |
| RS60.10050101504F | 10 | 50 | 10 | 150 | 4 |
| RS60.12045121004F | 12 | 45 | 12 | 100 | 4 |
| RS60.12055121504F | 12 | 55 | 12 | 150 | 4 |
| RS60.14060141504F | 14 | 60 | 14 | 150 | 4 |
| RS60.16060161504F | 16 | 60 | 16 | 150 | 4 |
| RS60.18060181504F | 18 | 60 | 18 | 150 | 4 |
| RS60.20070201504F | 20 | 70 | 20 | 150 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

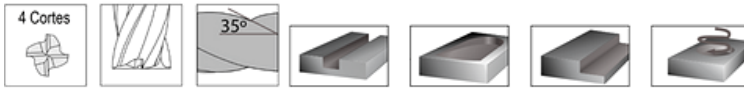
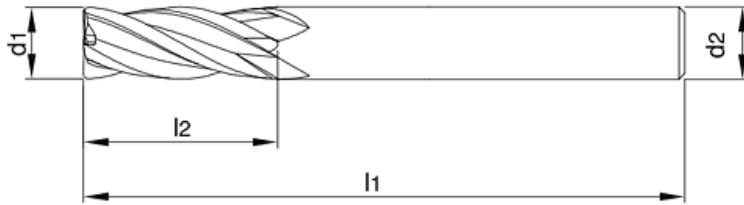
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Standard 4 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código            | d1  | l2 | d2 | l1  | Z |
|-------------------|-----|----|----|-----|---|
| RS55.03008030504F | 3   | 8  | 3  | 50  | 4 |
| RS55.01003040504F | 1   | 3  | 4  | 50  | 4 |
| RS55.01504040504F | 1.5 | 4  | 4  | 50  | 4 |
| RS55.02006040504F | 2   | 6  | 4  | 50  | 4 |
| RS55.02507040504F | 2.5 | 7  | 4  | 50  | 4 |
| RS55.03008040504F | 3   | 8  | 4  | 50  | 4 |
| RS55.03510040504F | 3.5 | 10 | 4  | 50  | 4 |
| RS55.04010040504F | 4   | 10 | 4  | 50  | 4 |
| RS55.05013050504F | 5   | 13 | 5  | 50  | 4 |
| RS55.02507060504F | 2.5 | 7  | 6  | 50  | 4 |
| RS55.03008060504F | 3   | 8  | 6  | 50  | 4 |
| RS55.03510060504F | 3.5 | 10 | 6  | 50  | 4 |
| RS55.04010060504F | 4   | 10 | 6  | 50  | 4 |
| RS55.04512060504F | 4.5 | 12 | 6  | 50  | 4 |
| RS55.05013060504F | 5   | 13 | 6  | 50  | 4 |
| RS55.06015060504F | 6   | 15 | 6  | 50  | 4 |
| RS55.07018080604F | 7   | 18 | 8  | 60  | 4 |
| RS55.08020080604F | 8   | 20 | 8  | 60  | 4 |
| RS55.09023100754F | 9   | 23 | 10 | 75  | 4 |
| RS55.10025100754F | 10  | 25 | 10 | 75  | 4 |
| RS55.11028120754F | 11  | 28 | 12 | 75  | 4 |
| RS55.12030120754F | 12  | 30 | 12 | 75  | 4 |
| RS55.14035140804F | 14  | 35 | 14 | 80  | 4 |
| RS55.14045141004F | 14  | 45 | 14 | 100 | 4 |
| RS55.16045161004F | 16  | 45 | 16 | 100 | 4 |
| RS55.18045181004F | 18  | 45 | 18 | 100 | 4 |
| RS55.20045201004F | 20  | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

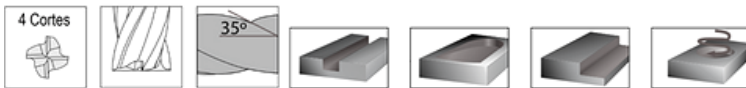
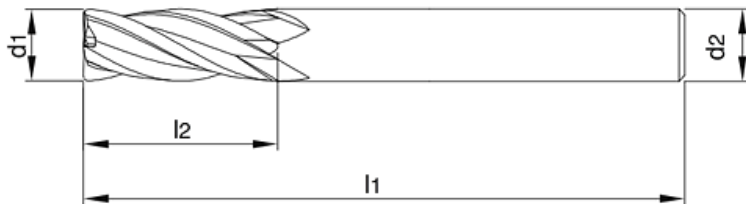
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Longa 4 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código            | d1 | l2 | d2 | l1  | Z |
|-------------------|----|----|----|-----|---|
| RS55.03012030754F | 3  | 12 | 3  | 75  | 4 |
| RS55.03012031004F | 3  | 12 | 3  | 100 | 4 |
| RS55.04016040754F | 4  | 16 | 4  | 75  | 4 |
| RS55.04020041004F | 4  | 20 | 4  | 100 | 4 |
| RS55.05020050754F | 5  | 20 | 5  | 75  | 4 |
| RS55.05025051004F | 5  | 25 | 5  | 100 | 4 |
| RS55.06020060754F | 6  | 20 | 6  | 75  | 4 |
| RS55.06030061004F | 6  | 30 | 6  | 100 | 4 |
| RS55.06040061504F | 6  | 40 | 6  | 150 | 4 |
| RS55.08025080754F | 8  | 25 | 8  | 75  | 4 |
| RS55.08035081004F | 8  | 35 | 8  | 100 | 4 |
| RS55.08050081504F | 8  | 50 | 8  | 150 | 4 |
| RS55.10040101004F | 10 | 40 | 10 | 100 | 4 |
| RS55.10050101504F | 10 | 50 | 10 | 150 | 4 |
| RS55.12045121004F | 12 | 45 | 12 | 100 | 4 |
| RS55.12055121504F | 12 | 55 | 12 | 150 | 4 |
| RS55.14060141504F | 14 | 60 | 14 | 150 | 4 |
| RS55.16060161504F | 16 | 60 | 16 | 150 | 4 |
| RS55.18060181504F | 18 | 60 | 18 | 150 | 4 |
| RS55.20070201504F | 20 | 70 | 20 | 150 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

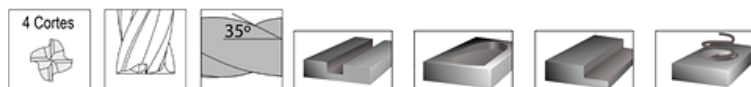
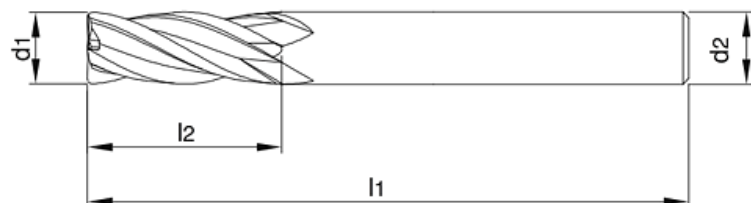


# Fresa Topo Reto Standard 4 Cortes

45  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiN



| Código            | d1  | l2 | d2 | l1  | Z |
|-------------------|-----|----|----|-----|---|
| RS45.03008030504F | 3   | 8  | 3  | 50  | 4 |
| RS45.01003040504F | 1   | 3  | 4  | 50  | 4 |
| RS45.01504040504F | 1.5 | 4  | 4  | 50  | 4 |
| RS45.02006040504F | 2   | 6  | 4  | 50  | 4 |
| RS45.02507040504F | 2.5 | 7  | 4  | 50  | 4 |
| RS45.03008040504F | 3   | 8  | 4  | 50  | 4 |
| RS45.03510040504F | 3.5 | 10 | 4  | 50  | 4 |
| RS45.04010040504F | 4   | 10 | 4  | 50  | 4 |
| RS45.05013050504F | 5   | 13 | 5  | 50  | 4 |
| RS45.02507060504F | 2.5 | 7  | 6  | 50  | 4 |
| RS45.03008060504F | 3   | 8  | 6  | 50  | 4 |
| RS45.03510060504F | 3.5 | 10 | 6  | 50  | 4 |
| RS45.04010060504F | 4   | 10 | 6  | 50  | 4 |
| RS45.04512060504F | 4.5 | 12 | 6  | 50  | 4 |
| RS45.05013060504F | 5   | 13 | 6  | 50  | 4 |
| RS45.06015060504F | 6   | 15 | 6  | 50  | 4 |
| RS45.07018080604F | 7   | 18 | 8  | 60  | 4 |
| RS45.08020080604F | 8   | 20 | 8  | 60  | 4 |
| RS45.09023100754F | 9   | 23 | 10 | 75  | 4 |
| RS45.10025100754F | 10  | 25 | 10 | 75  | 4 |
| RS45.11028120754F | 11  | 28 | 12 | 75  | 4 |
| RS45.12030120754F | 12  | 30 | 12 | 75  | 4 |
| RS45.14035140804F | 14  | 35 | 14 | 80  | 4 |
| RS45.14045141004F | 14  | 45 | 14 | 100 | 4 |
| RS45.16045161004F | 16  | 45 | 16 | 100 | 4 |
| RS45.18045181004F | 18  | 45 | 18 | 100 | 4 |
| RS45.20045201004F | 20  | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                | ●            | ●             |                  |               | ●           |          |

● Adequado

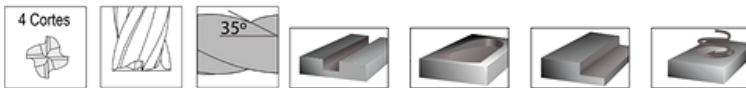
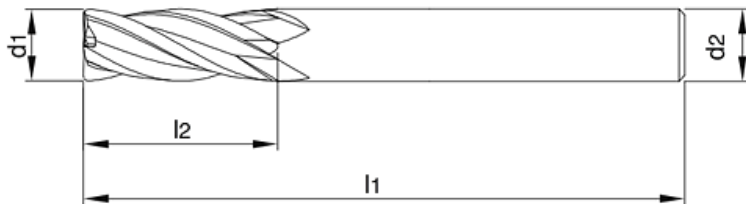
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Longa 4 Cortes

45  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiN



| Código            | d1 | l2 | d2 | l1  | Z |
|-------------------|----|----|----|-----|---|
| RS45.03012030754F | 3  | 12 | 3  | 75  | 4 |
| RS45.03012031004F | 3  | 12 | 3  | 100 | 4 |
| RS45.04016040754F | 4  | 16 | 4  | 75  | 4 |
| RS45.04020041004F | 4  | 20 | 4  | 100 | 4 |
| RS45.05020050754F | 5  | 20 | 5  | 75  | 4 |
| RS45.05025051004F | 5  | 25 | 5  | 100 | 4 |
| RS45.06020060754F | 6  | 20 | 6  | 75  | 4 |
| RS45.06030061004F | 6  | 30 | 6  | 100 | 4 |
| RS45.06040061504F | 6  | 40 | 6  | 150 | 4 |
| RS45.08025080754F | 8  | 25 | 8  | 75  | 4 |
| RS45.08035081004F | 8  | 35 | 8  | 100 | 4 |
| RS45.08050081504F | 8  | 50 | 8  | 150 | 4 |
| RS45.10040101004F | 10 | 40 | 10 | 100 | 4 |
| RS45.10050101504F | 10 | 50 | 10 | 150 | 4 |
| RS45.12045121004F | 12 | 45 | 12 | 100 | 4 |
| RS45.12055121504F | 12 | 55 | 12 | 150 | 4 |
| RS45.14060141504F | 14 | 60 | 14 | 150 | 4 |
| RS45.16060161504F | 16 | 60 | 16 | 150 | 4 |
| RS45.18060181504F | 18 | 60 | 18 | 150 | 4 |
| RS45.20070201504F | 20 | 70 | 20 | 150 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                | ●            | ●             |                  |               | ●           |          |

● Adequado

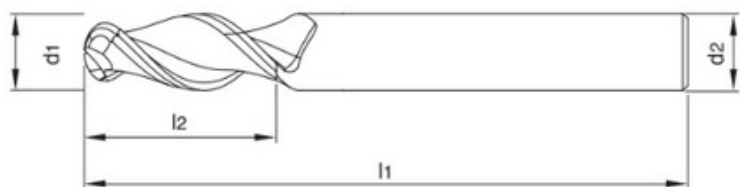
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Esférico Standard 2 Cortes

65  
HRC

Ângulo de  
Hélice  
30

Revestimento  
AlTiSiN



| Código             | d1  | l2 | d2 | l1  | z |
|--------------------|-----|----|----|-----|---|
| RSE65.03006030502F | 3   | 6  | 3  | 50  | 2 |
| RSE65.01002040502F | 1   | 2  | 4  | 50  | 2 |
| RSE65.01503040502F | 1.5 | 3  | 4  | 50  | 2 |
| RSE65.02004040502F | 2   | 4  | 4  | 50  | 2 |
| RSE65.02505040502F | 2.5 | 5  | 4  | 50  | 2 |
| RSE65.03006040502F | 3   | 6  | 4  | 50  | 2 |
| RSE65.04008040502F | 4   | 8  | 4  | 50  | 2 |
| RSE65.05010050502F | 5   | 10 | 5  | 50  | 2 |
| RSE65.06012060502F | 6   | 12 | 6  | 50  | 2 |
| RSE65.08016080602F | 8   | 16 | 8  | 60  | 2 |
| RSE65.10020100752F | 10  | 20 | 10 | 75  | 2 |
| RSE65.12024120752F | 12  | 24 | 12 | 75  | 2 |
| RSE65.14028141002F | 14  | 28 | 14 | 100 | 2 |
| RSE65.16032161002F | 16  | 32 | 16 | 100 | 2 |
| RSE65.18036181002F | 18  | 36 | 18 | 100 | 2 |
| RSE65.20040201002F | 20  | 40 | 20 | 100 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

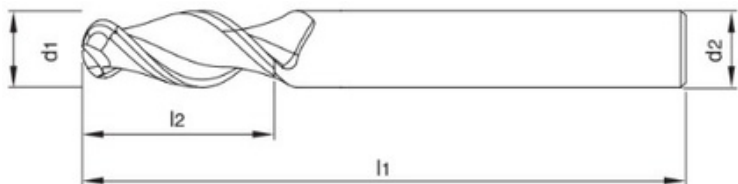
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo esférico Longa 2 Cortes

65  
HRC

Ângulo de  
Hélice  
30

Revestimento  
AlTiSiN



| Código             | d1 | l2 | d2 | l1  | Z |
|--------------------|----|----|----|-----|---|
| RSE65.04008040752F | 4  | 8  | 4  | 75  | 2 |
| RSE65.04008041002F | 4  | 8  | 4  | 100 | 2 |
| RSE65.05010050752F | 5  | 10 | 5  | 75  | 2 |
| RSE65.05010051002F | 5  | 10 | 5  | 100 | 2 |
| RSE65.06012060752F | 6  | 12 | 6  | 75  | 2 |
| RSE65.06012061002F | 6  | 12 | 6  | 100 | 2 |
| RSE65.06012061502F | 6  | 12 | 6  | 150 | 2 |
| RSE65.08016080752F | 8  | 16 | 8  | 75  | 2 |
| RSE65.08016081002F | 8  | 16 | 8  | 100 | 2 |
| RSE65.08016081502F | 8  | 16 | 8  | 150 | 2 |
| RSE65.10020101002F | 10 | 20 | 10 | 100 | 2 |
| RSE65.10020101502F | 10 | 20 | 10 | 150 | 2 |
| RSE65.12024121002F | 12 | 24 | 12 | 100 | 2 |
| RSE65.12024121502F | 12 | 24 | 12 | 150 | 2 |
| RSE65.14028141502F | 14 | 28 | 14 | 150 | 2 |
| RSE65.16032161502F | 16 | 32 | 16 | 150 | 2 |
| RSE65.18036181502F | 18 | 36 | 18 | 150 | 2 |
| RSE65.20040201502F | 20 | 40 | 20 | 150 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

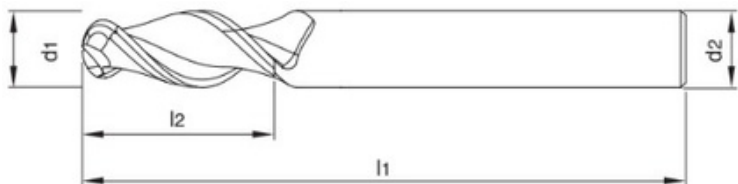
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Esférico Standard 2 Cortes

60  
HRC

Ângulo de  
Hélice  
30

Revestimento  
AlTiSiN



| Código             | d1  | l2 | d2 | l1  | Z |
|--------------------|-----|----|----|-----|---|
| RSE60.03006030502F | 3   | 6  | 3  | 50  | 2 |
| RSE60.01002040502F | 1   | 2  | 4  | 50  | 2 |
| RSE60.01503040502F | 1.5 | 3  | 4  | 50  | 2 |
| RSE60.02004040502F | 2   | 4  | 4  | 50  | 2 |
| RSE60.02505040502F | 2.5 | 5  | 4  | 50  | 2 |
| RSE60.03006040502F | 3   | 6  | 4  | 50  | 2 |
| RSE60.04008040502F | 4   | 8  | 4  | 50  | 2 |
| RSE60.05010050502F | 5   | 10 | 5  | 50  | 2 |
| RSE60.06012060502F | 6   | 12 | 6  | 50  | 2 |
| RSE60.08016080602F | 8   | 16 | 8  | 60  | 2 |
| RSE60.10020100752F | 10  | 20 | 10 | 75  | 2 |
| RSE60.12024120752F | 12  | 24 | 12 | 75  | 2 |
| RSE60.14028141002F | 14  | 28 | 14 | 100 | 2 |
| RSE60.16032161002F | 16  | 32 | 16 | 100 | 2 |
| RSE60.18036181002F | 18  | 36 | 18 | 100 | 2 |
| RSE60.20040201002F | 20  | 40 | 20 | 100 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

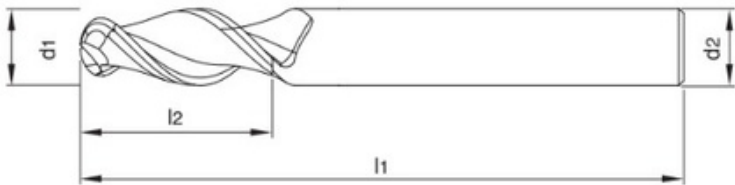
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Esférico Longa 2 Cortes

60  
HRC

Ângulo de  
Hélice  
30

Revestimento  
AlTiSiN



| Código             | d1 | l2 | d2 | l1  | Z |
|--------------------|----|----|----|-----|---|
| RSE60.04008040752F | 4  | 8  | 4  | 75  | 2 |
| RSE60.04008041002F | 4  | 8  | 4  | 100 | 2 |
| RSE60.05010050752F | 5  | 10 | 5  | 75  | 2 |
| RSE60.05010051002F | 5  | 10 | 5  | 100 | 2 |
| RSE60.06012060752F | 6  | 12 | 6  | 75  | 2 |
| RSE60.06012061002F | 6  | 12 | 6  | 100 | 2 |
| RSE60.06012061502F | 6  | 12 | 6  | 150 | 2 |
| RSE60.08016080752F | 8  | 16 | 8  | 75  | 2 |
| RSE60.08016081002F | 8  | 16 | 8  | 100 | 2 |
| RSE60.08016081502F | 8  | 16 | 8  | 150 | 2 |
| RSE60.10020101002F | 10 | 20 | 10 | 100 | 2 |
| RSE60.10020101502F | 10 | 20 | 10 | 150 | 2 |
| RSE60.12024121002F | 12 | 24 | 12 | 100 | 2 |
| RSE60.12024121502F | 12 | 24 | 12 | 150 | 2 |
| RSE60.14028141502F | 14 | 28 | 14 | 150 | 2 |
| RSE60.16032161502F | 16 | 32 | 16 | 150 | 2 |
| RSE60.18036181502F | 18 | 36 | 18 | 150 | 2 |
| RSE60.20040201502F | 20 | 40 | 20 | 150 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

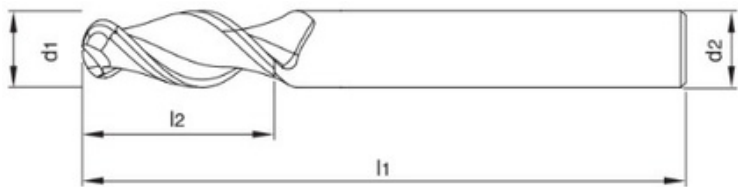
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Esférico Standard 2 Cortes

55  
HRC

Ângulo de  
Hélice  
30

Revestimento  
TiSiN



| Código             | d1  | l2 | d2 | l1  | Z |
|--------------------|-----|----|----|-----|---|
| RSE55.03006030502F | 3   | 6  | 3  | 50  | 2 |
| RSE55.01002040502F | 1   | 2  | 4  | 50  | 2 |
| RSE55.01503040502F | 1.5 | 3  | 4  | 50  | 2 |
| RSE55.02004040502F | 2   | 4  | 4  | 50  | 2 |
| RSE55.02505040502F | 2.5 | 5  | 4  | 50  | 2 |
| RSE55.03006040502F | 3   | 6  | 4  | 50  | 2 |
| RSE55.04008040502F | 4   | 8  | 4  | 50  | 2 |
| RSE55.05010050502F | 5   | 10 | 5  | 50  | 2 |
| RSE55.06012060502F | 6   | 12 | 6  | 50  | 2 |
| RSE55.07014080602F | 7   | 14 | 8  | 60  | 2 |
| RSE55.08016080602F | 8   | 16 | 8  | 60  | 2 |
| RSE55.09018100752F | 9   | 18 | 10 | 75  | 2 |
| RSE55.10020100752F | 10  | 20 | 10 | 75  | 2 |
| RSE55.11022120752F | 11  | 22 | 12 | 75  | 2 |
| RSE55.12024120752F | 12  | 24 | 12 | 75  | 2 |
| RSE55.14028141002F | 14  | 28 | 14 | 100 | 2 |
| RSE55.16032161002F | 16  | 32 | 16 | 100 | 2 |
| RSE55.18036181002F | 18  | 36 | 18 | 100 | 2 |
| RSE55.20040201002F | 20  | 40 | 20 | 100 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

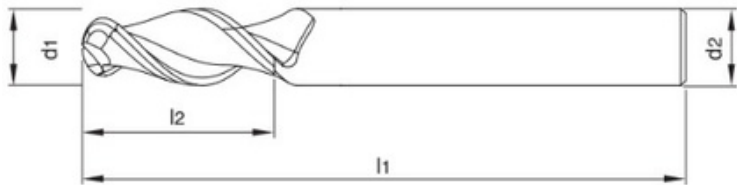
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo esférico Longa 2 Cortes

55  
HRC

Ângulo de  
Hélice  
30

Revestimento  
TiSiN



| Código             | d1 | l2 | d2 | l1  | z |
|--------------------|----|----|----|-----|---|
| RSE55.03006030752F | 3  | 6  | 3  | 75  | 2 |
| RSE55.03006031002F | 3  | 6  | 3  | 100 | 2 |
| RSE55.04008040752F | 4  | 8  | 4  | 75  | 2 |
| RSE55.04008041002F | 4  | 8  | 4  | 100 | 2 |
| RSE55.05010050752F | 5  | 10 | 5  | 75  | 2 |
| RSE55.05010051002F | 5  | 10 | 5  | 100 | 2 |
| RSE55.06012060752F | 6  | 12 | 6  | 75  | 2 |
| RSE55.06012061002F | 6  | 12 | 6  | 100 | 2 |
| RSE55.06012061502F | 6  | 12 | 6  | 150 | 2 |
| RSE55.08016080752F | 8  | 16 | 8  | 75  | 2 |
| RSE55.08016081002F | 8  | 16 | 8  | 100 | 2 |
| RSE55.08016081502F | 8  | 16 | 8  | 150 | 2 |
| RSE55.10020101002F | 10 | 20 | 10 | 100 | 2 |
| RSE55.10020101502F | 10 | 20 | 10 | 150 | 2 |
| RSE55.12024121002F | 12 | 24 | 12 | 100 | 2 |
| RSE55.12024121502F | 12 | 24 | 12 | 150 | 2 |
| RSE55.14028141502F | 14 | 28 | 14 | 150 | 2 |
| RSE55.16032161502F | 16 | 32 | 16 | 150 | 2 |
| RSE55.18036181502F | 18 | 36 | 18 | 150 | 2 |
| RSE55.20040201502F | 20 | 40 | 20 | 150 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

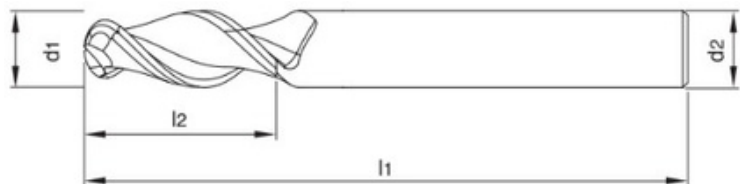


# Fresa Topo esférico Standard 2 Cortes

45  
HRC

Ângulo de  
Hélice  
30

Revestimento  
AlTiN



| Código             | d1  | l2 | d2 | l1  | Z |
|--------------------|-----|----|----|-----|---|
| RSE45.03006030502F | 3   | 6  | 3  | 50  | 2 |
| RSE45.01002040502F | 1   | 2  | 4  | 50  | 2 |
| RSE45.01503040502F | 1.5 | 3  | 4  | 50  | 2 |
| RSE45.02004040502F | 2   | 4  | 4  | 50  | 2 |
| RSE45.02505040502F | 2.5 | 5  | 4  | 50  | 2 |
| RSE45.03006040502F | 3   | 6  | 4  | 50  | 2 |
| RSE45.04008040502F | 4   | 8  | 4  | 50  | 2 |
| RSE45.05010050502F | 5   | 10 | 5  | 50  | 2 |
| RSE45.06012060502F | 6   | 12 | 6  | 50  | 2 |
| RSE45.07014080602F | 7   | 14 | 8  | 60  | 2 |
| RSE45.08016080602F | 8   | 16 | 8  | 60  | 2 |
| RSE45.09018100752F | 9   | 18 | 10 | 75  | 2 |
| RSE45.10020100752F | 10  | 20 | 10 | 75  | 2 |
| RSE45.11022120752F | 11  | 22 | 12 | 75  | 2 |
| RSE45.12024120752F | 12  | 24 | 12 | 75  | 2 |
| RSE45.14028141002F | 14  | 28 | 14 | 100 | 2 |
| RSE45.16032161002F | 16  | 32 | 16 | 100 | 2 |
| RSE45.18036181002F | 18  | 36 | 18 | 100 | 2 |
| RSE45.20040201002F | 20  | 40 | 20 | 100 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                | ●            | ●             |                  |               | ●           |          |

● Adequado

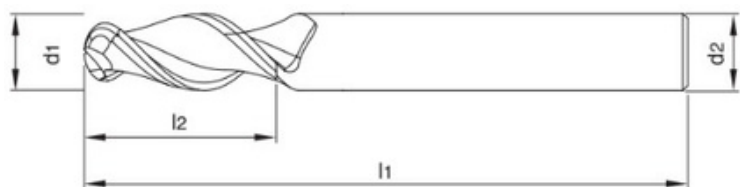
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo esférico Longa 2 Cortes

45  
HRC

Ângulo de  
Hélice  
30

Revestimento  
AlTiN



| Código             | d1 | l2 | d2 | l1  | Z |
|--------------------|----|----|----|-----|---|
| RSE45.03006030752F | 3  | 6  | 3  | 75  | 2 |
| RSE45.03006031002F | 3  | 6  | 3  | 100 | 2 |
| RSE45.04008040752F | 4  | 8  | 4  | 75  | 2 |
| RSE45.04008041002F | 4  | 8  | 4  | 100 | 2 |
| RSE45.05010050752F | 5  | 10 | 5  | 75  | 2 |
| RSE45.05010051002F | 5  | 10 | 5  | 100 | 2 |
| RSE45.06012060752F | 6  | 12 | 6  | 75  | 2 |
| RSE45.06012061002F | 6  | 12 | 6  | 100 | 2 |
| RSE45.06012061502F | 6  | 12 | 6  | 150 | 2 |
| RSE45.08016080752F | 8  | 16 | 8  | 75  | 2 |
| RSE45.08016081002F | 8  | 16 | 8  | 100 | 2 |
| RSE45.08016081502F | 8  | 16 | 8  | 150 | 2 |
| RSE45.10020101002F | 10 | 20 | 10 | 100 | 2 |
| RSE45.10020101502F | 10 | 20 | 10 | 150 | 2 |
| RSE45.12024121002F | 12 | 24 | 12 | 100 | 2 |
| RSE45.12024121502F | 12 | 24 | 12 | 150 | 2 |
| RSE45.14028141502F | 14 | 28 | 14 | 150 | 2 |
| RSE45.16032161502F | 16 | 32 | 16 | 150 | 2 |
| RSE45.18036181502F | 18 | 36 | 18 | 150 | 2 |
| RSE45.20040201502F | 20 | 40 | 20 | 150 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                | ●            | ●             |                  |               | ●           |          |

● Adequado

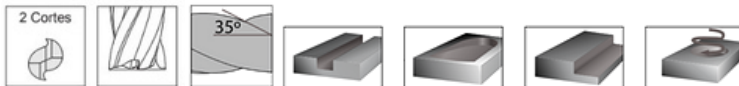
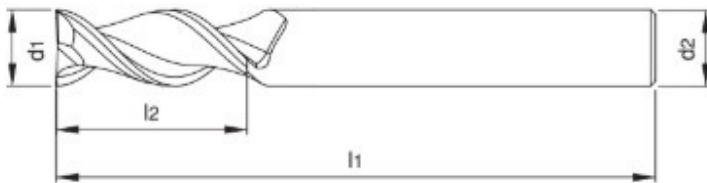
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Standard 2 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código            | d1  | l2 | d2 | l1  | z |
|-------------------|-----|----|----|-----|---|
| RS55.03008030502F | 3   | 8  | 3  | 50  | 2 |
| RS55.01003040502F | 1   | 3  | 4  | 50  | 2 |
| RS55.01504040502F | 1.5 | 4  | 4  | 50  | 2 |
| RS55.02006040502F | 2   | 6  | 4  | 50  | 2 |
| RS55.02507040502F | 2.5 | 7  | 4  | 50  | 2 |
| RS55.03008040502F | 3   | 8  | 4  | 50  | 2 |
| RS55.03510040502F | 3.5 | 10 | 4  | 50  | 2 |
| RS55.04010040502F | 4   | 10 | 4  | 50  | 2 |
| RS55.05013050502F | 5   | 13 | 5  | 50  | 2 |
| RS55.02507060502F | 2.5 | 7  | 6  | 50  | 2 |
| RS55.03008060502F | 3   | 8  | 6  | 50  | 2 |
| RS55.03510060502F | 3.5 | 10 | 6  | 50  | 2 |
| RS55.04010060502F | 4   | 10 | 6  | 50  | 2 |
| RS55.04512060502F | 4.5 | 12 | 6  | 50  | 2 |
| RS55.05013060502F | 5   | 13 | 6  | 50  | 2 |
| RS55.06015060502F | 6   | 15 | 6  | 50  | 2 |
| RS55.07018080602F | 7   | 18 | 8  | 60  | 2 |
| RS55.08020080602F | 8   | 20 | 8  | 60  | 2 |
| RS55.09023100752F | 9   | 23 | 10 | 75  | 2 |
| RS55.10025100752F | 10  | 25 | 10 | 75  | 2 |
| RS55.11028120752F | 11  | 28 | 12 | 75  | 2 |
| RS55.12030120752F | 12  | 30 | 12 | 75  | 2 |
| RS55.14035140802F | 14  | 35 | 14 | 80  | 2 |
| RS55.14045141002F | 14  | 45 | 14 | 100 | 2 |
| RS55.16045161002F | 16  | 45 | 16 | 100 | 2 |
| RS55.18045181002F | 18  | 45 | 18 | 100 | 2 |
| RS55.20045201002F | 20  | 45 | 20 | 100 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

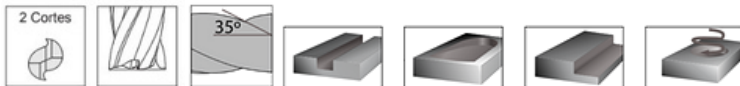
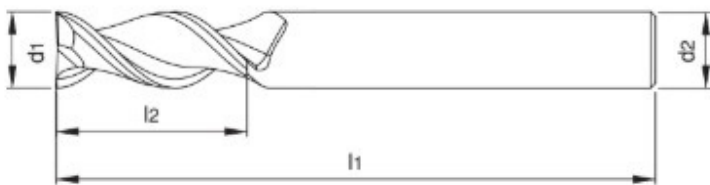
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Longa 2 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código            | d1 | l2 | d2 | l1  | Z |
|-------------------|----|----|----|-----|---|
| RS55.03012030752F | 3  | 12 | 3  | 75  | 2 |
| RS55.03012031002F | 3  | 12 | 3  | 100 | 2 |
| RS55.04016040752F | 4  | 16 | 4  | 75  | 2 |
| RS55.04020041002F | 4  | 20 | 4  | 100 | 2 |
| RS55.05020050752F | 5  | 20 | 5  | 75  | 2 |
| RS55.05025051002F | 5  | 25 | 5  | 100 | 2 |
| RS55.06020060752F | 6  | 20 | 6  | 75  | 2 |
| RS55.06030061002F | 6  | 30 | 6  | 100 | 2 |
| RS55.06040061502F | 6  | 40 | 6  | 150 | 2 |
| RS55.08025080752F | 8  | 25 | 8  | 75  | 2 |
| RS55.08035081002F | 8  | 35 | 8  | 100 | 2 |
| RS55.08050081502F | 8  | 50 | 8  | 150 | 2 |
| RS55.10040101002F | 10 | 40 | 10 | 100 | 2 |
| RS55.10050101502F | 10 | 50 | 10 | 150 | 2 |
| RS55.12045121002F | 12 | 45 | 12 | 100 | 2 |
| RS55.12055121502F | 12 | 55 | 12 | 150 | 2 |
| RS55.14060141502F | 14 | 60 | 14 | 150 | 2 |
| RS55.16060161502F | 16 | 60 | 16 | 150 | 2 |
| RS55.18060181502F | 18 | 60 | 18 | 150 | 2 |
| RS55.20070201502F | 20 | 70 | 20 | 150 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

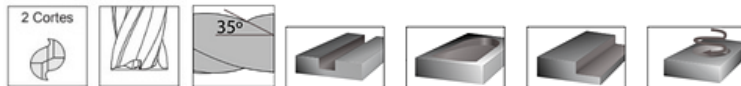
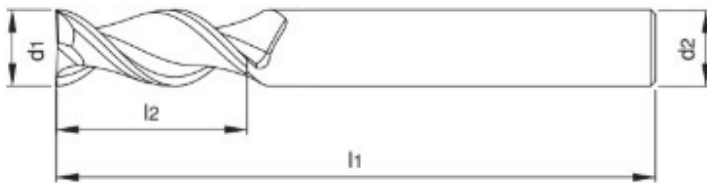
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Standard 2 Cortes

45  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiN



| Código            | d1  | l2 | d2 | l1  | Z |
|-------------------|-----|----|----|-----|---|
| RS45.03008030502F | 3   | 8  | 3  | 50  | 2 |
| RS45.01003040502F | 1   | 3  | 4  | 50  | 2 |
| RS45.01504040502F | 1.5 | 4  | 4  | 50  | 2 |
| RS45.02006040502F | 2   | 6  | 4  | 50  | 2 |
| RS45.02507040502F | 2.5 | 7  | 4  | 50  | 2 |
| RS45.03008040502F | 3   | 8  | 4  | 50  | 2 |
| RS45.03510040502F | 3.5 | 10 | 4  | 50  | 2 |
| RS45.04010040502F | 4   | 10 | 4  | 50  | 2 |
| RS45.05013050502F | 5   | 13 | 5  | 50  | 2 |
| RS45.02507060502F | 2.5 | 7  | 6  | 50  | 2 |
| RS45.03008060502F | 3   | 8  | 6  | 50  | 2 |
| RS45.03510060502F | 3.5 | 10 | 6  | 50  | 2 |
| RS45.04010060502F | 4   | 10 | 6  | 50  | 2 |
| RS45.04512060502F | 4.5 | 12 | 6  | 50  | 2 |
| RS45.05013060502F | 5   | 13 | 6  | 50  | 2 |
| RS45.06015060502F | 6   | 15 | 6  | 50  | 2 |
| RS45.07018080602F | 7   | 18 | 8  | 60  | 2 |
| RS45.08020080602F | 8   | 20 | 8  | 60  | 2 |
| RS45.09023100752F | 9   | 23 | 10 | 75  | 2 |
| RS45.10025100752F | 10  | 25 | 10 | 75  | 2 |
| RS45.11028120752F | 11  | 28 | 12 | 75  | 2 |
| RS45.12030120752F | 12  | 30 | 12 | 75  | 2 |
| RS45.14035140802F | 14  | 35 | 14 | 80  | 2 |
| RS45.14045141002F | 14  | 45 | 14 | 100 | 2 |
| RS45.16045161002F | 16  | 45 | 16 | 100 | 2 |
| RS45.18045181002F | 18  | 45 | 18 | 100 | 2 |
| RS45.20045201002F | 20  | 45 | 20 | 100 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                | ●            | ●             |                  |               | ●           |          |

● Adequado

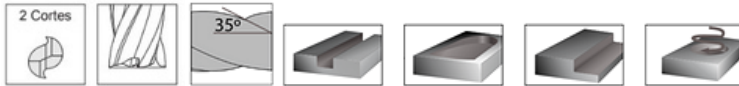
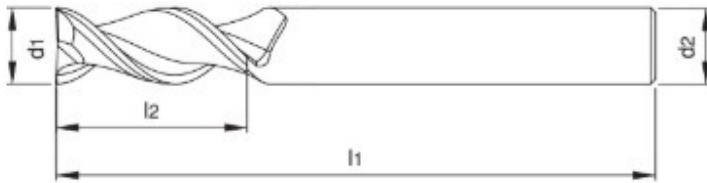
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Longa 2 Cortes

45  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiN



| Código            | d1 | l2 | d2 | l1  | Z |
|-------------------|----|----|----|-----|---|
| RS45.03012030752F | 3  | 12 | 3  | 75  | 2 |
| RS45.03012031002F | 3  | 12 | 3  | 100 | 2 |
| RS45.04016040752F | 4  | 16 | 4  | 75  | 2 |
| RS45.04020041002F | 4  | 20 | 4  | 100 | 2 |
| RS45.05020050752F | 5  | 20 | 5  | 75  | 2 |
| RS45.05025051002F | 5  | 25 | 5  | 100 | 2 |
| RS45.06020060752F | 6  | 20 | 6  | 75  | 2 |
| RS45.06030061002F | 6  | 30 | 6  | 100 | 2 |
| RS45.06040061502F | 6  | 40 | 6  | 150 | 2 |
| RS45.08025080752F | 8  | 25 | 8  | 75  | 2 |
| RS45.08035081002F | 8  | 35 | 8  | 100 | 2 |
| RS45.08050081502F | 8  | 50 | 8  | 150 | 2 |
| RS45.10040101002F | 10 | 40 | 10 | 100 | 2 |
| RS45.10050101502F | 10 | 50 | 10 | 150 | 2 |
| RS45.12045121002F | 12 | 45 | 12 | 100 | 2 |
| RS45.12055121502F | 12 | 55 | 12 | 150 | 2 |
| RS45.14060141502F | 14 | 60 | 14 | 150 | 2 |
| RS45.16060161502F | 16 | 60 | 16 | 150 | 2 |
| RS45.18060181502F | 18 | 60 | 18 | 150 | 2 |
| RS45.20070201502F | 20 | 70 | 20 | 150 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                | ●            | ●             |                  |               | ●           |          |

● Adequado

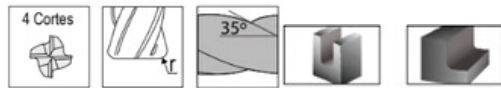
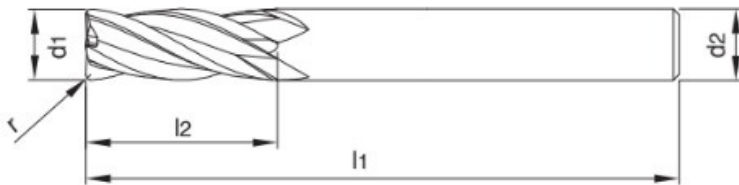
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Toroidal Standard 4 Cortes

65  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiSiN



| Código               | d1 | R   | l2 | d2 | l1  | Z |
|----------------------|----|-----|----|----|-----|---|
| RS65.0401004050R054F | 4  | 0.5 | 10 | 4  | 50  | 4 |
| RS65.0401004050R104F | 4  | 1   | 10 | 4  | 50  | 4 |
| RS65.0501305050R054F | 5  | 0.5 | 13 | 5  | 50  | 4 |
| RS65.0501305050R104F | 5  | 1   | 13 | 5  | 50  | 4 |
| RS65.0601506050R054F | 6  | 0.5 | 15 | 6  | 50  | 4 |
| RS65.0601506050R104F | 6  | 1   | 15 | 6  | 50  | 4 |
| RS65.0802008060R054F | 8  | 0.5 | 20 | 8  | 60  | 4 |
| RS65.0802008060R104F | 8  | 1   | 20 | 8  | 60  | 4 |
| RS65.0802008060R204F | 8  | 2   | 20 | 8  | 60  | 4 |
| RS65.0802008060R304F | 8  | 3   | 20 | 8  | 60  | 4 |
| RS65.1002510075R054F | 10 | 0.5 | 25 | 10 | 75  | 4 |
| RS65.1002510075R104F | 10 | 1   | 25 | 10 | 75  | 4 |
| RS65.1002510075R204F | 10 | 2   | 25 | 10 | 75  | 4 |
| RS65.1002510075R304F | 10 | 3   | 25 | 10 | 75  | 4 |
| RS65.1203012075R054F | 12 | 0.5 | 30 | 12 | 75  | 4 |
| RS65.1203012075R104F | 12 | 1   | 30 | 12 | 75  | 4 |
| RS65.1203012075R204F | 12 | 2   | 30 | 12 | 75  | 4 |
| RS65.1203012075R304F | 12 | 3   | 30 | 12 | 75  | 4 |
| RS65.1403514100R054F | 14 | 0.5 | 35 | 14 | 100 | 4 |
| RS65.1404514100R104F | 14 | 1   | 45 | 14 | 100 | 4 |
| RS65.1604516100R054F | 16 | 0.5 | 45 | 16 | 100 | 4 |
| RS65.1604516100R104F | 16 | 1   | 45 | 16 | 100 | 4 |
| RS65.1804518100R054F | 18 | 0.5 | 45 | 18 | 100 | 4 |
| RS65.1804518100R104F | 18 | 1   | 45 | 18 | 100 | 4 |
| RS65.2004520100R054F | 20 | 0.5 | 45 | 20 | 100 | 4 |
| RS65.2004520100R104F | 20 | 1   | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

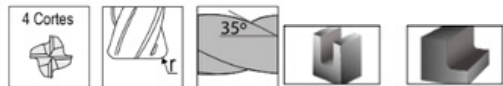
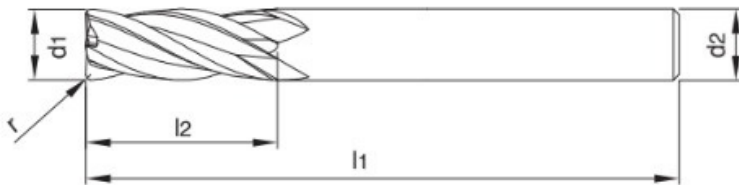
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Toroidal Longa 4 Cortes

65  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiSiN



| Código               | d1 | R   | l2 | d2 | l1  | z |
|----------------------|----|-----|----|----|-----|---|
| RS65.0401604075R054F | 4  | 0.5 | 16 | 4  | 75  | 4 |
| RS65.0401604075R104F | 4  | 1   | 16 | 4  | 75  | 4 |
| RS65.0402004100R054F | 4  | 0.5 | 20 | 4  | 100 | 4 |
| RS65.0402004100R104F | 4  | 1   | 20 | 4  | 100 | 4 |
| RS65.0502005075R054F | 5  | 0.5 | 20 | 5  | 75  | 4 |
| RS65.0502005075R104F | 5  | 1   | 20 | 5  | 75  | 4 |
| RS65.0502505100R054F | 5  | 0.5 | 25 | 5  | 100 | 4 |
| RS65.0502505100R104F | 5  | 1   | 25 | 5  | 100 | 4 |
| RS65.0602006075R054F | 6  | 0.5 | 20 | 6  | 75  | 4 |
| RS65.0602006075R104F | 6  | 1   | 20 | 6  | 75  | 4 |
| RS65.0603006100R054F | 6  | 0.5 | 30 | 6  | 100 | 4 |
| RS65.0603006100R104F | 6  | 1   | 30 | 6  | 100 | 4 |
| RS65.0802508075R054F | 8  | 0.5 | 25 | 8  | 75  | 4 |
| RS65.0802508075R104F | 8  | 1   | 25 | 8  | 75  | 4 |
| RS65.0803508100R054F | 8  | 0.5 | 35 | 8  | 100 | 4 |
| RS65.0803508100R104F | 8  | 1   | 35 | 8  | 100 | 4 |
| RS65.1004010100R054F | 10 | 0.5 | 40 | 10 | 100 | 4 |
| RS65.1004010100R104F | 10 | 1   | 40 | 10 | 100 | 4 |
| RS65.1204512100R054F | 12 | 0.5 | 45 | 12 | 100 | 4 |
| RS65.1204512100R104F | 12 | 1   | 45 | 12 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

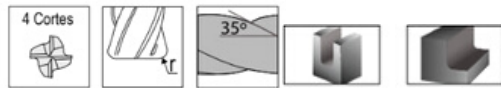
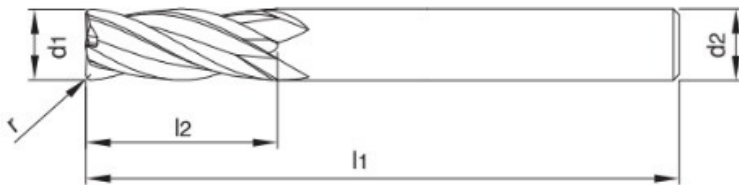


# Fresa Topo Toroidal Standard 4 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código               | d1 | R   | l2 | d2 | l1  | Z |
|----------------------|----|-----|----|----|-----|---|
| RS55.0300803050R054F | 3  | 0.5 | 8  | 3  | 50  | 4 |
| RS55.0300803050R104F | 3  | 1   | 8  | 3  | 50  | 4 |
| RS55.0300804050R054F | 3  | 0.5 | 8  | 4  | 50  | 4 |
| RS55.0300804050R104F | 3  | 1   | 8  | 4  | 50  | 4 |
| RS55.0401004050R054F | 4  | 0.5 | 10 | 4  | 50  | 4 |
| RS55.0401004050R104F | 4  | 1   | 10 | 4  | 50  | 4 |
| RS55.0501305050R054F | 5  | 0.5 | 13 | 5  | 50  | 4 |
| RS55.0501305050R104F | 5  | 1   | 13 | 5  | 50  | 4 |
| RS55.0601506050R054F | 6  | 0.5 | 15 | 6  | 50  | 4 |
| RS55.0601506050R104F | 6  | 1   | 15 | 6  | 50  | 4 |
| RS55.0802008060R054F | 8  | 0.5 | 20 | 8  | 60  | 4 |
| RS55.0802008060R104F | 8  | 1   | 20 | 8  | 60  | 4 |
| RS55.0802008060R204F | 8  | 2   | 20 | 8  | 60  | 4 |
| RS55.0802008060R304F | 8  | 3   | 20 | 8  | 60  | 4 |
| RS55.1002510075R054F | 10 | 0.5 | 25 | 10 | 75  | 4 |
| RS55.1002510075R104F | 10 | 1   | 25 | 10 | 75  | 4 |
| RS55.1002510075R204F | 10 | 2   | 25 | 10 | 75  | 4 |
| RS55.1002510075R304F | 10 | 3   | 25 | 10 | 75  | 4 |
| RS55.1203012075R054F | 12 | 0.5 | 30 | 12 | 75  | 4 |
| RS55.1203012075R104F | 12 | 1   | 30 | 12 | 75  | 4 |
| RS55.1203012075R204F | 12 | 2   | 30 | 12 | 75  | 4 |
| RS55.1203012075R304F | 12 | 3   | 30 | 12 | 75  | 4 |
| RS55.1403514100R054F | 14 | 0.5 | 35 | 14 | 100 | 4 |
| RS55.1404514100R104F | 14 | 1   | 45 | 14 | 100 | 4 |
| RS55.1604516100R054F | 16 | 0.5 | 45 | 16 | 100 | 4 |
| RS55.1604516100R104F | 16 | 1   | 45 | 16 | 100 | 4 |
| RS55.1804518100R054F | 18 | 0.5 | 45 | 18 | 100 | 4 |
| RS55.1804518100R104F | 18 | 1   | 45 | 18 | 100 | 4 |
| RS55.2004520100R054F | 20 | 0.5 | 45 | 20 | 100 | 4 |
| RS55.2004520100R104F | 20 | 1   | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

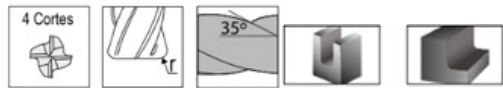
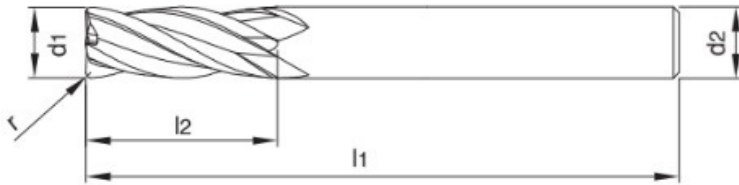
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Toroidal Longa 4 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código               | d1 | R   | l2 | d2 | l1  | Z |
|----------------------|----|-----|----|----|-----|---|
| RS55.0301203075R054F | 3  | 0.5 | 12 | 3  | 75  | 4 |
| RS55.0301203075R104F | 3  | 1   | 12 | 3  | 75  | 4 |
| RS55.0301203100R054F | 3  | 0.5 | 12 | 3  | 100 | 4 |
| RS55.0301203100R104F | 3  | 1   | 12 | 3  | 100 | 4 |
| RS55.0401604075R054F | 4  | 0.5 | 16 | 4  | 75  | 4 |
| RS55.0401604075R104F | 4  | 1   | 16 | 4  | 75  | 4 |
| RS55.0402004100R054F | 4  | 0.5 | 20 | 4  | 100 | 4 |
| RS55.0402004100R104F | 4  | 1   | 20 | 4  | 100 | 4 |
| RS55.0502005075R054F | 5  | 0.5 | 20 | 5  | 75  | 4 |
| RS55.0502005075R104F | 5  | 1   | 20 | 5  | 75  | 4 |
| RS55.0502505100R054F | 5  | 0.5 | 25 | 5  | 100 | 4 |
| RS55.0502505100R104F | 5  | 1   | 25 | 5  | 100 | 4 |
| RS55.0602006075R054F | 6  | 0.5 | 20 | 6  | 75  | 4 |
| RS55.0602006075R104F | 6  | 1   | 20 | 6  | 75  | 4 |
| RS55.0603006100R054F | 6  | 0.5 | 30 | 6  | 100 | 4 |
| RS55.0603006100R104F | 6  | 1   | 30 | 6  | 100 | 4 |
| RS55.0604006150R054F | 6  | 0.5 | 40 | 6  | 150 | 4 |
| RS55.0604006150R104F | 6  | 1   | 40 | 6  | 150 | 4 |
| RS55.0802508075R054F | 8  | 0.5 | 25 | 8  | 75  | 4 |
| RS55.0802508075R104F | 8  | 1   | 25 | 8  | 75  | 4 |
| RS55.0803508100R054F | 8  | 0.5 | 35 | 8  | 100 | 4 |
| RS55.0803508100R104F | 8  | 1   | 35 | 8  | 100 | 4 |
| RS55.0805008150R054F | 8  | 0.5 | 50 | 8  | 150 | 4 |
| RS55.0805008150R104F | 8  | 1   | 50 | 8  | 150 | 4 |
| RS55.1004010100R054F | 10 | 0.5 | 40 | 10 | 100 | 4 |
| RS55.1004010100R104F | 10 | 1   | 40 | 10 | 100 | 4 |
| RS55.1005010150R054F | 10 | 0.5 | 50 | 10 | 150 | 4 |
| RS55.1005010150R104F | 10 | 1   | 50 | 10 | 150 | 4 |
| RS55.1204512100R054F | 12 | 0.5 | 45 | 12 | 100 | 4 |
| RS55.1204512100R104F | 12 | 1   | 45 | 12 | 100 | 4 |
| RS55.1205512150R054F | 12 | 0.5 | 55 | 12 | 150 | 4 |
| RS55.1205512150R104F | 12 | 1   | 55 | 12 | 150 | 4 |

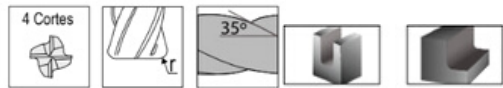
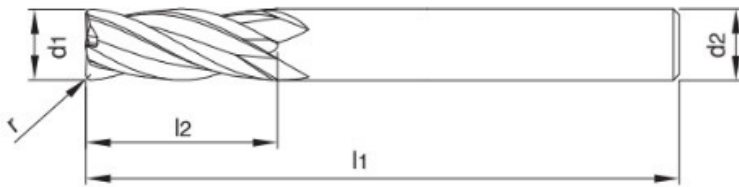
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Toroidal Standard 4 Cortes

45  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiN



| Código               | d1 | R   | l2 | d2 | l1  | Z |
|----------------------|----|-----|----|----|-----|---|
| RS45.0300803050R054C | 3  | 0.5 | 8  | 3  | 50  | 4 |
| RS45.0300803050R104C | 3  | 1   | 8  | 3  | 50  | 4 |
| RS45.0300804050R054C | 3  | 0.5 | 8  | 4  | 50  | 4 |
| RS45.0300804050R104C | 3  | 1   | 8  | 4  | 50  | 4 |
| RS45.0401004050R054C | 4  | 0.5 | 10 | 4  | 50  | 4 |
| RS45.0401004050R104C | 4  | 1   | 10 | 4  | 50  | 4 |
| RS45.0501305050R054C | 5  | 0.5 | 13 | 5  | 50  | 4 |
| RS45.0501305050R104C | 5  | 1   | 13 | 5  | 50  | 4 |
| RS45.0601506050R054C | 6  | 0.5 | 15 | 6  | 50  | 4 |
| RS45.0601506050R104C | 6  | 1   | 15 | 6  | 50  | 4 |
| RS45.0802008060R054C | 8  | 0.5 | 20 | 8  | 60  | 4 |
| RS45.0802008060R104C | 8  | 1   | 20 | 8  | 60  | 4 |
| RS45.0802008060R204C | 8  | 2   | 20 | 8  | 60  | 4 |
| RS45.0802008060R304C | 8  | 3   | 20 | 8  | 60  | 4 |
| RS45.1002510075R054C | 10 | 0.5 | 25 | 10 | 75  | 4 |
| RS45.1002510075R104C | 10 | 1   | 25 | 10 | 75  | 4 |
| RS45.1002510075R204C | 10 | 2   | 25 | 10 | 75  | 4 |
| RS45.1002510075R304C | 10 | 3   | 25 | 10 | 75  | 4 |
| RS45.1203012075R054C | 12 | 0.5 | 30 | 12 | 75  | 4 |
| RS45.1203012075R104C | 12 | 1   | 30 | 12 | 75  | 4 |
| RS45.1203012075R204C | 12 | 2   | 30 | 12 | 75  | 4 |
| RS45.1203012075R304C | 12 | 3   | 30 | 12 | 75  | 4 |
| RS45.1403514100R054C | 14 | 0.5 | 35 | 14 | 100 | 4 |
| RS45.1404514100R104C | 14 | 1   | 45 | 14 | 100 | 4 |
| RS45.1604516100R054C | 16 | 0.5 | 45 | 16 | 100 | 4 |
| RS45.1604516100R104C | 16 | 1   | 45 | 16 | 100 | 4 |
| RS45.1804518100R054C | 18 | 0.5 | 45 | 18 | 100 | 4 |
| RS45.1804518100R104C | 18 | 1   | 45 | 18 | 100 | 4 |
| RS45.2004520100R054C | 20 | 0.5 | 45 | 20 | 100 | 4 |
| RS45.2004520100R104C | 20 | 1   | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                | ●            | ●             |                  |               | ●           |          |

● Adequado

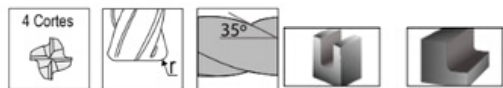
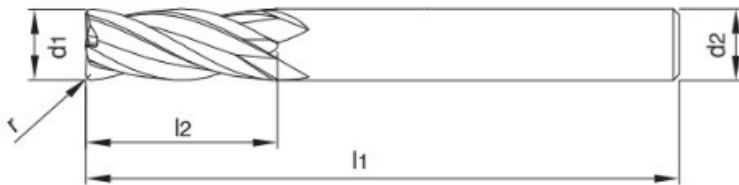
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Toroidal Longa 4 Cortes

45  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiN



| Código               | d1 | R   | l2 | d2 | l1  | Z |
|----------------------|----|-----|----|----|-----|---|
| RS45.0301203075R054C | 3  | 0.5 | 12 | 3  | 75  | 4 |
| RS45.0301203075R104C | 3  | 1   | 12 | 3  | 75  | 4 |
| RS45.0301203100R054C | 3  | 0.5 | 12 | 3  | 100 | 4 |
| RS45.0301203100R104C | 3  | 1   | 12 | 3  | 100 | 4 |
| RS45.0401604075R054C | 4  | 0.5 | 16 | 4  | 75  | 4 |
| RS45.0401604075R104C | 4  | 1   | 16 | 4  | 75  | 4 |
| RS45.0402004100R054C | 4  | 0.5 | 20 | 4  | 100 | 4 |
| RS45.0402004100R104C | 4  | 1   | 20 | 4  | 100 | 4 |
| RS45.0502005075R054C | 5  | 0.5 | 20 | 5  | 75  | 4 |
| RS45.0502005075R104C | 5  | 1   | 20 | 5  | 75  | 4 |
| RS45.0502505100R054C | 5  | 0.5 | 25 | 5  | 100 | 4 |
| RS45.0502505100R104C | 5  | 1   | 25 | 5  | 100 | 4 |
| RS45.0602006075R054C | 6  | 0.5 | 20 | 6  | 75  | 4 |
| RS45.0602006075R104C | 6  | 1   | 20 | 6  | 75  | 4 |
| RS45.0603006100R054C | 6  | 0.5 | 30 | 6  | 100 | 4 |
| RS45.0603006100R104C | 6  | 1   | 30 | 6  | 100 | 4 |
| RS45.0604006150R054C | 6  | 0.5 | 40 | 6  | 150 | 4 |
| RS45.0604006150R104C | 6  | 1   | 40 | 6  | 150 | 4 |
| RS45.0802508075R054C | 8  | 0.5 | 25 | 8  | 75  | 4 |
| RS45.0802508075R104C | 8  | 1   | 25 | 8  | 75  | 4 |
| RS45.0803508100R054C | 8  | 0.5 | 35 | 8  | 100 | 4 |
| RS45.0803508100R104C | 8  | 1   | 35 | 8  | 100 | 4 |
| RS45.0805008150R054C | 8  | 0.5 | 50 | 8  | 150 | 4 |
| RS45.0805008150R104C | 8  | 1   | 50 | 8  | 150 | 4 |
| RS45.1004010100R054C | 10 | 0.5 | 40 | 10 | 100 | 4 |
| RS45.1004010100R104C | 10 | 1   | 40 | 10 | 100 | 4 |
| RS45.1005010150R054C | 10 | 0.5 | 50 | 10 | 150 | 4 |
| RS45.1005010150R104C | 10 | 1   | 50 | 10 | 150 | 4 |
| RS45.1204512100R054C | 12 | 0.5 | 45 | 12 | 100 | 4 |
| RS45.1205512150R054C | 12 | 0.5 | 55 | 12 | 150 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                | ●            | ●             |                  |               | ●           |          |

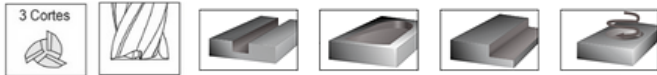
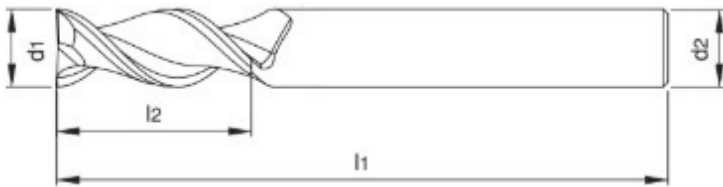
● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Standard 3 Cortes Alumínio

55  
HRC

Sem  
Revestimento



| Código             | d1  | l2 | d2 | l1  | Z |
|--------------------|-----|----|----|-----|---|
| RSA55.03009030503C | 3   | 9  | 3  | 50  | 3 |
| RSA55.01003040503C | 1   | 3  | 4  | 50  | 3 |
| RSA55.01505040503C | 1.5 | 5  | 4  | 50  | 3 |
| RSA55.02006040503C | 2   | 6  | 4  | 50  | 3 |
| RSA55.02508040503C | 2.5 | 8  | 4  | 50  | 3 |
| RSA55.03009040503C | 3   | 9  | 4  | 50  | 3 |
| RSA55.03512040503C | 3.5 | 12 | 4  | 50  | 3 |
| RSA55.04012040503C | 4   | 12 | 4  | 50  | 3 |
| RSA55.05015050503C | 5   | 15 | 5  | 50  | 3 |
| RSA55.02006060503C | 2   | 6  | 6  | 50  | 3 |
| RSA55.03009060503C | 3   | 9  | 6  | 50  | 3 |
| RSA55.04012060503C | 4   | 12 | 6  | 50  | 3 |
| RSA55.05015060503C | 5   | 15 | 6  | 50  | 3 |
| RSA55.06018060503C | 6   | 18 | 6  | 50  | 3 |
| RSA55.07021080603C | 7   | 21 | 8  | 60  | 3 |
| RSA55.08024080603C | 8   | 24 | 8  | 60  | 3 |
| RSA55.09027100753C | 9   | 27 | 10 | 75  | 3 |
| RSA55.10030100753C | 10  | 30 | 10 | 75  | 3 |
| RSA55.11033120753C | 11  | 33 | 12 | 75  | 3 |
| RSA55.12036120753C | 12  | 36 | 12 | 75  | 3 |
| RSA55.14035140803C | 14  | 35 | 14 | 80  | 3 |
| RSA55.14045141003C | 14  | 45 | 14 | 100 | 3 |
| RSA55.16045161003C | 16  | 45 | 16 | 100 | 3 |
| RSA55.18045181003C | 18  | 45 | 18 | 100 | 3 |
| RSA55.20045201003C | 20  | 45 | 20 | 100 | 3 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                |              |               | ●                | ●             |             |          |

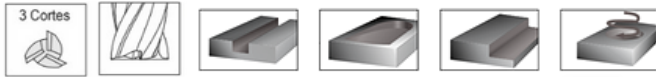
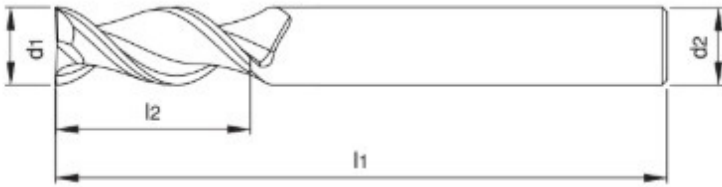
● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Longa 3 Cortes Alumínio

55  
HRC

Sem  
Revestimento



| Código             | d1 | l2 | d2 | l1  | Z |
|--------------------|----|----|----|-----|---|
| RSA55.03015030753C | 3  | 15 | 3  | 75  | 3 |
| RSA55.03015031003C | 3  | 15 | 3  | 100 | 3 |
| RSA55.04020040753C | 4  | 20 | 4  | 75  | 3 |
| RSA55.04025051003C | 4  | 25 | 5  | 100 | 3 |
| RSA55.05020050753C | 5  | 20 | 5  | 75  | 3 |
| RSA55.05025051003C | 5  | 25 | 5  | 100 | 3 |
| RSA55.06030060753C | 6  | 30 | 6  | 75  | 3 |
| RSA55.06030061003C | 6  | 30 | 6  | 100 | 3 |
| RSA55.06040061503C | 6  | 40 | 6  | 150 | 3 |
| RSA55.08035080753C | 8  | 35 | 8  | 75  | 3 |
| RSA55.08040081003C | 8  | 40 | 8  | 100 | 3 |
| RSA55.08050081503C | 8  | 50 | 8  | 150 | 3 |
| RSA55.10040101003C | 10 | 40 | 10 | 100 | 3 |
| RSA55.10050101503C | 10 | 50 | 10 | 150 | 3 |
| RSA55.12045121003C | 12 | 45 | 12 | 100 | 3 |
| RSA55.12060121503C | 12 | 60 | 12 | 150 | 3 |
| RSA55.14060141503C | 14 | 60 | 14 | 150 | 3 |
| RSA55.16060161503C | 16 | 60 | 16 | 150 | 3 |
| RSA55.18060181503C | 18 | 60 | 18 | 150 | 3 |
| RSA55.20070201503C | 20 | 70 | 20 | 150 | 3 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                |              |               | ●                | ●             |             |          |

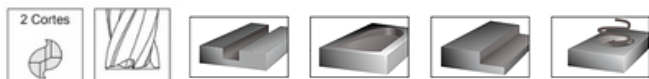
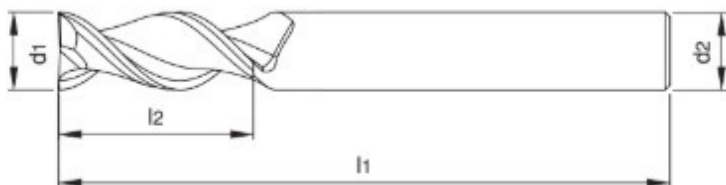
● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Standard 2 Cortes Alumínio

55  
HRC

Sem  
Revestimento



| Código             | d1  | l2 | d2 | l1  | Z |
|--------------------|-----|----|----|-----|---|
| RSA55.03009030502C | 3   | 9  | 3  | 50  | 2 |
| RSA55.01003040502C | 1   | 3  | 4  | 50  | 2 |
| RSA55.01505040502C | 1.5 | 5  | 4  | 50  | 2 |
| RSA55.02006040502C | 2   | 6  | 4  | 50  | 2 |
| RSA55.02508040502C | 2.5 | 8  | 4  | 50  | 2 |
| RSA55.03009040502C | 3   | 9  | 4  | 50  | 2 |
| RSA55.04012040502C | 4   | 12 | 4  | 50  | 2 |
| RSA55.05015050502C | 5   | 15 | 5  | 50  | 2 |
| RSA55.06018060502C | 6   | 18 | 6  | 50  | 2 |
| RSA55.08024080602C | 8   | 24 | 8  | 60  | 2 |
| RSA55.10030100752C | 10  | 30 | 10 | 75  | 2 |
| RSA55.12036120752C | 12  | 36 | 12 | 75  | 2 |
| RSA55.14035140802C | 14  | 35 | 14 | 80  | 2 |
| RSA55.14045141002C | 14  | 45 | 14 | 100 | 2 |
| RSA55.16045161002C | 16  | 45 | 16 | 100 | 2 |
| RSA55.18045181002C | 18  | 45 | 18 | 100 | 2 |
| RSA55.20045201002C | 20  | 45 | 20 | 100 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                |              |               | ●                | ●             |             |          |

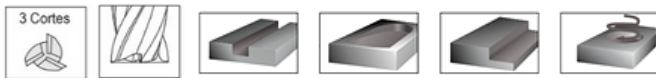
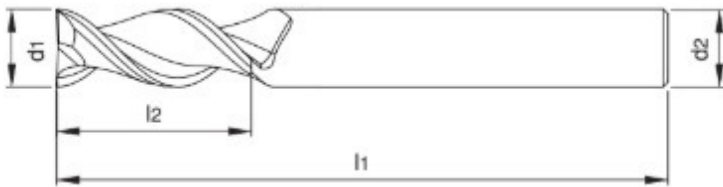
● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Standard 3 Cortes Alumínio

45  
HRC

Sem  
Revestimento



| Código             | d1  | l2 | d2 | l1  | Z |
|--------------------|-----|----|----|-----|---|
| RSA45.03009030503C | 3   | 9  | 3  | 50  | 3 |
| RSA45.01003040503C | 1   | 3  | 4  | 50  | 3 |
| RSA45.01505040503C | 1.5 | 5  | 4  | 50  | 3 |
| RSA45.02006040503C | 2   | 6  | 4  | 50  | 3 |
| RSA45.02508040503C | 2.5 | 8  | 4  | 50  | 3 |
| RSA45.03009040503C | 3   | 9  | 4  | 50  | 3 |
| RSA45.03512040503C | 3.5 | 12 | 4  | 50  | 3 |
| RSA45.04012040503C | 4   | 12 | 4  | 50  | 3 |
| RSA45.05015050503C | 5   | 15 | 5  | 50  | 3 |
| RSA45.02006060503C | 2   | 6  | 6  | 50  | 3 |
| RSA45.03009060503C | 3   | 9  | 6  | 50  | 3 |
| RSA45.04012060503C | 4   | 12 | 6  | 50  | 3 |
| RSA45.05015060503C | 5   | 15 | 6  | 50  | 3 |
| RSA45.06018060503C | 6   | 18 | 6  | 50  | 3 |
| RSA45.07021080603C | 7   | 21 | 8  | 60  | 3 |
| RSA45.08024080603C | 8   | 24 | 8  | 60  | 3 |
| RSA45.09027100753C | 9   | 27 | 10 | 75  | 3 |
| RSA45.10030100753C | 10  | 30 | 10 | 75  | 3 |
| RSA45.11033120753C | 11  | 33 | 12 | 75  | 3 |
| RSA45.12036120753C | 12  | 36 | 12 | 75  | 3 |
| RSA45.14035140803C | 14  | 35 | 14 | 80  | 3 |
| RSA45.14045141003C | 14  | 45 | 14 | 100 | 3 |
| RSA45.16045161003C | 16  | 45 | 16 | 100 | 3 |
| RSA45.18045181003C | 18  | 45 | 18 | 100 | 3 |
| RSA45.20045201003C | 20  | 45 | 20 | 100 | 3 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                |              |               | ●                | ●             |             |          |

● Adequado

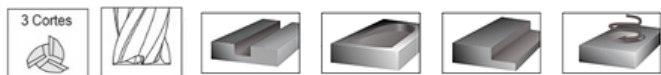
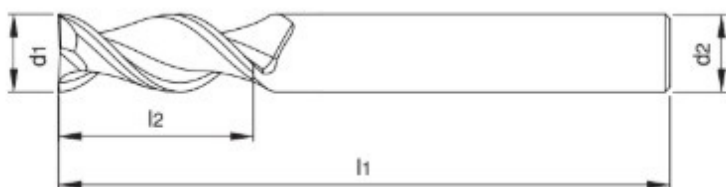
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm



# Fresa Topo Reto Longa 3 Cortes Alumínio

45  
HRC

Sem  
Revestimento



| Código             | d1 | l2 | d2 | l1  | Z |
|--------------------|----|----|----|-----|---|
| RSA45.03015030753C | 3  | 15 | 3  | 75  | 3 |
| RSA45.03015031003C | 3  | 15 | 3  | 100 | 3 |
| RSA45.04020040753C | 4  | 20 | 4  | 75  | 3 |
| RSA45.04025051003C | 4  | 25 | 5  | 100 | 3 |
| RSA45.05020050753C | 5  | 20 | 5  | 75  | 3 |
| RSA45.05025051003C | 5  | 25 | 5  | 100 | 3 |
| RSA45.06030060753C | 6  | 30 | 6  | 75  | 3 |
| RSA45.06030061003C | 6  | 30 | 6  | 100 | 3 |
| RSA45.06040061503C | 6  | 40 | 6  | 150 | 3 |
| RSA45.08035080753C | 8  | 35 | 8  | 75  | 3 |
| RSA45.08040081003C | 8  | 40 | 8  | 100 | 3 |
| RSA45.08050081503C | 8  | 50 | 8  | 150 | 3 |
| RSA45.10040101003C | 10 | 40 | 10 | 100 | 3 |
| RSA45.10050101503C | 10 | 50 | 10 | 150 | 3 |
| RSA45.12045121003C | 12 | 45 | 12 | 100 | 3 |
| RSA45.12060121503C | 12 | 60 | 12 | 150 | 3 |
| RSA45.14060141503C | 14 | 60 | 14 | 150 | 3 |
| RSA45.16060161503C | 16 | 60 | 16 | 150 | 3 |
| RSA45.18060181503C | 18 | 60 | 18 | 150 | 3 |
| RSA45.20070201503C | 20 | 70 | 20 | 150 | 3 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                |              |               | ●                | ●             |             |          |

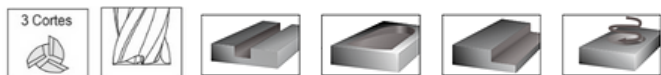
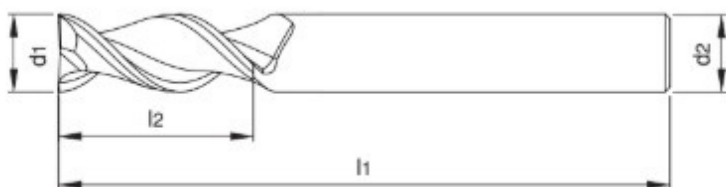
● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Standard 3 Cortes Alumínio

45  
HRC

Sem  
Revestimento



| Código             | d1  | l2 | d2 | l1  | Z |
|--------------------|-----|----|----|-----|---|
| RSA45.03009030503C | 3   | 9  | 3  | 50  | 3 |
| RSA45.01003040503C | 1   | 3  | 4  | 50  | 3 |
| RSA45.01505040503C | 1.5 | 5  | 4  | 50  | 3 |
| RSA45.02006040503C | 2   | 6  | 4  | 50  | 3 |
| RSA45.02508040503C | 2.5 | 8  | 4  | 50  | 3 |
| RSA45.03009040503C | 3   | 9  | 4  | 50  | 3 |
| RSA45.03512040503C | 3.5 | 12 | 4  | 50  | 3 |
| RSA45.04012040503C | 4   | 12 | 4  | 50  | 3 |
| RSA45.05015050503C | 5   | 15 | 5  | 50  | 3 |
| RSA45.05015060503C | 5   | 15 | 6  | 50  | 3 |
| RSA45.06018060503C | 6   | 18 | 6  | 50  | 3 |
| RSA45.08024080603C | 8   | 24 | 8  | 60  | 3 |
| RSA45.10030100753C | 10  | 30 | 10 | 75  | 3 |
| RSA45.12036120753C | 12  | 36 | 12 | 75  | 3 |
| RSA45.14045141003C | 14  | 45 | 14 | 100 | 3 |
| RSA45.16045161003C | 16  | 45 | 16 | 100 | 3 |
| RSA45.18045181003C | 18  | 45 | 18 | 100 | 3 |
| RSA45.20045201003C | 20  | 45 | 20 | 100 | 3 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                |              |               | ●                | ●             |             |          |

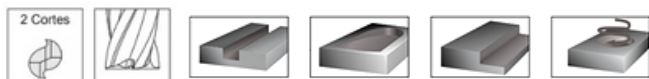
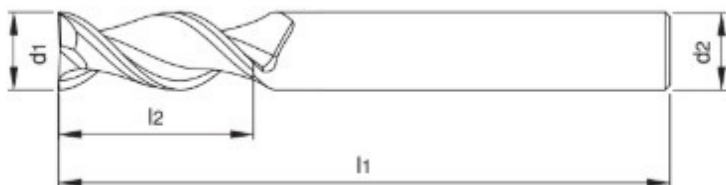
● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Standard 2 Cortes Alumínio

45  
HRC

Sem  
Revestimento



| Código             | d1  | l2 | d2 | l1  | z |
|--------------------|-----|----|----|-----|---|
| RSA45.03009030502C | 3   | 9  | 3  | 50  | 2 |
| RSA45.01003040502C | 1   | 3  | 4  | 50  | 2 |
| RSA45.01505040502C | 1.5 | 5  | 4  | 50  | 2 |
| RSA45.02006040502C | 2   | 6  | 4  | 50  | 2 |
| RSA45.02508040502C | 2.5 | 8  | 4  | 50  | 2 |
| RSA45.03009040502C | 3   | 9  | 4  | 50  | 2 |
| RSA45.04012040502C | 4   | 12 | 4  | 50  | 2 |
| RSA45.05015050502C | 5   | 15 | 5  | 50  | 2 |
| RSA45.06018060502C | 6   | 18 | 6  | 50  | 2 |
| RSA45.08024080602C | 8   | 24 | 8  | 60  | 2 |
| RSA45.10030100752C | 10  | 30 | 10 | 75  | 2 |
| RSA45.12036120752C | 12  | 36 | 12 | 75  | 2 |
| RSA45.14035140802C | 14  | 35 | 14 | 80  | 2 |
| RSA45.14045141002C | 14  | 45 | 14 | 100 | 2 |
| RSA45.16045161002C | 16  | 45 | 16 | 100 | 2 |
| RSA45.18045181002C | 18  | 45 | 18 | 100 | 2 |
| RSA45.20045201002C | 20  | 45 | 20 | 100 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
|                |              |               | ●                | ●             |             |          |

● Adequado

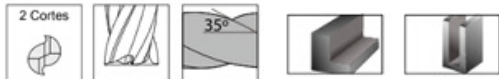
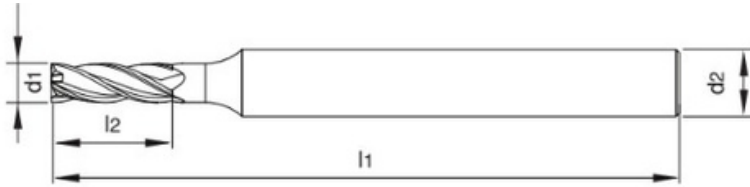
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Micro Fresa Topo Reto 2 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código             | d1  | l2  | d2 | l1 | Z |
|--------------------|-----|-----|----|----|---|
| RSM55.00204040502C | 0.2 | 0.4 | 4  | 50 | 2 |
| RSM55.00306040502C | 0.3 | 0.6 | 4  | 50 | 2 |
| RSM55.00408040502C | 0.4 | 0.8 | 4  | 50 | 2 |
| RSM55.00510040502C | 0.5 | 1   | 4  | 50 | 2 |
| RSM55.00612040502C | 0.6 | 1.2 | 4  | 50 | 2 |
| RSM55.00714040502C | 0.7 | 1.4 | 4  | 50 | 2 |
| RSM55.00816040502C | 0.8 | 1.6 | 4  | 50 | 2 |
| RSM55.00918040502C | 0.9 | 1.8 | 4  | 50 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

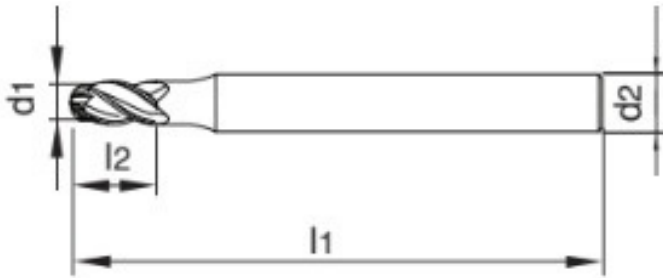
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Micro Fresa Topo Esférico 2 Cortes

55  
HRC

Ângulo de  
Hélice  
30

Revestimento  
TiSiN



| Código              | d1  | l2  | d2 | l1 | z |
|---------------------|-----|-----|----|----|---|
| RSME55.00204040502C | 0.2 | 0.4 | 4  | 50 | 2 |
| RSME55.00306040502C | 0.3 | 0.6 | 4  | 50 | 2 |
| RSME55.00408040502C | 0.4 | 0.8 | 4  | 50 | 2 |
| RSME55.00510040502C | 0.5 | 1   | 4  | 50 | 2 |
| RSME55.00612040502C | 0.6 | 1.2 | 4  | 50 | 2 |
| RSME55.00714040502C | 0.7 | 1.4 | 4  | 50 | 2 |
| RSME55.00816040502C | 0.8 | 1.6 | 4  | 50 | 2 |
| RSME55.00918040502C | 0.9 | 1.8 | 4  | 50 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

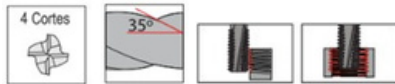
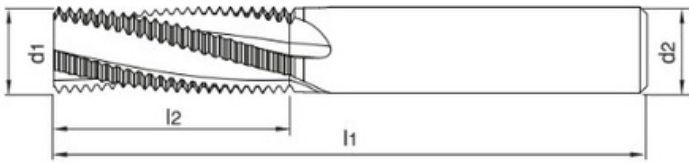
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo para Desbaste 4 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código             | d1 | l2 | d2 | l1  | Z |
|--------------------|----|----|----|-----|---|
| RSD55.06015060504C | 6  | 15 | 6  | 50  | 4 |
| RSD55.08020080604C | 8  | 20 | 8  | 60  | 4 |
| RSD55.10025100754C | 10 | 25 | 10 | 75  | 4 |
| RSD55.12030120754C | 12 | 30 | 12 | 75  | 4 |
| RSD55.14045141004C | 14 | 45 | 14 | 100 | 4 |
| RSD55.16045161004C | 16 | 45 | 16 | 100 | 4 |
| RSD55.18045181004C | 18 | 45 | 18 | 100 | 4 |
| RSD55.20045201004C | 20 | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

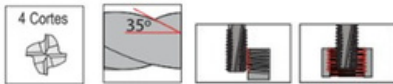
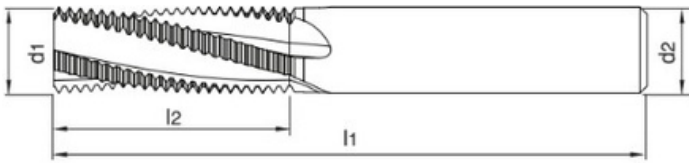
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo para Desbaste 4 Cortes

45  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiN



| Código             | d1 | l2 | d2 | l1  | Z |
|--------------------|----|----|----|-----|---|
| RSD45.06015060504C | 6  | 15 | 6  | 50  | 4 |
| RSD45.08020080604C | 8  | 20 | 8  | 60  | 4 |
| RSD45.10025100754C | 10 | 25 | 10 | 75  | 4 |
| RSD45.12030120754C | 12 | 30 | 12 | 75  | 4 |
| RSD45.14045141004C | 14 | 45 | 14 | 100 | 4 |
| RSD45.16045161004C | 16 | 45 | 16 | 100 | 4 |
| RSD45.18045181004C | 18 | 45 | 18 | 100 | 4 |
| RSD45.20045201004C | 20 | 45 | 20 | 100 | 4 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

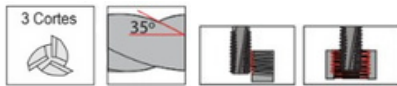
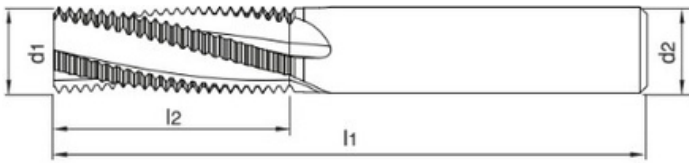
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo para Desbaste 3 Cortes Alumínio

55  
HRC

Ângulo de  
Hélice  
35

Sem  
Revestimento



| Código              | d1 | l2 | d2 | l1  | Z |
|---------------------|----|----|----|-----|---|
| RSDA55.06018060503C | 6  | 18 | 6  | 50  | 3 |
| RSDA55.08024080603C | 8  | 24 | 8  | 60  | 3 |
| RSDA55.10030100753C | 10 | 30 | 10 | 75  | 3 |
| RSDA55.12036120753C | 12 | 36 | 12 | 75  | 3 |
| RSDA55.14045141003C | 14 | 45 | 14 | 100 | 3 |
| RSDA55.16045161003C | 16 | 45 | 16 | 100 | 3 |
| RSDA55.18045181003C | 18 | 45 | 18 | 100 | 3 |
| RSDA55.20045201003C | 20 | 45 | 20 | 100 | 3 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

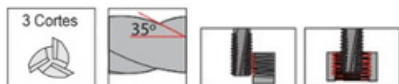
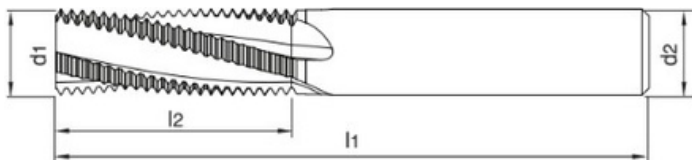


# Fresa Topo para Desbaste 3 Cortes Alumínio

45  
HRC

Ângulo de  
Hélice  
35

Sem  
Revestimento



| Código              | d1 | l2 | d2 | l1  | Z |
|---------------------|----|----|----|-----|---|
| RSDA45.06018060503C | 6  | 18 | 6  | 50  | 3 |
| RSDA45.08024080603C | 8  | 24 | 8  | 60  | 3 |
| RSDA45.10030100753C | 10 | 30 | 10 | 75  | 3 |
| RSDA45.12036120753C | 12 | 36 | 12 | 75  | 3 |
| RSDA45.14045141003C | 14 | 45 | 14 | 100 | 3 |
| RSDA45.16045161003C | 16 | 45 | 16 | 100 | 3 |
| RSDA45.18045181003C | 18 | 45 | 18 | 100 | 3 |
| RSDA45.20045201003C | 20 | 45 | 20 | 100 | 3 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

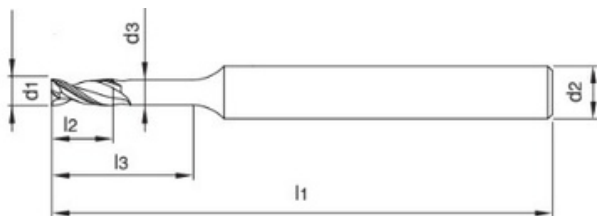
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Long Neck 2 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



| Código      | d1  | lc  | l2 | d2 | l1 | z |
|-------------|-----|-----|----|----|----|---|
| RS02.450A1  | 0.2 | 0.3 | 1  | 4  | 50 | 2 |
| RS02.450A2  | 0.2 | 0.3 | 2  | 4  | 50 | 2 |
| RS03.450A1  | 0.3 | 0.6 | 1  | 4  | 50 | 2 |
| RS03.450A2  | 0.3 | 0.6 | 2  | 4  | 50 | 2 |
| RS03.450A3  | 0.3 | 0.6 | 3  | 4  | 50 | 2 |
| RS04.450A2  | 0.4 | 0.6 | 2  | 4  | 50 | 2 |
| RS04.450A3  | 0.4 | 0.6 | 3  | 4  | 50 | 2 |
| RS04.450A4  | 0.4 | 0.6 | 4  | 4  | 50 | 2 |
| RS04.450A6  | 0.4 | 0.6 | 6  | 4  | 50 | 2 |
| RS05.450A2  | 0.5 | 0.8 | 2  | 4  | 50 | 2 |
| RS05.450A3  | 0.5 | 0.8 | 3  | 4  | 50 | 2 |
| RS05.450A4  | 0.5 | 0.8 | 4  | 4  | 50 | 2 |
| RS05.450A5  | 0.5 | 0.8 | 5  | 4  | 50 | 2 |
| RS05.450A6  | 0.5 | 0.8 | 6  | 4  | 50 | 2 |
| RS05.450A8  | 0.5 | 0.8 | 8  | 4  | 50 | 2 |
| RS06.450A2  | 0.6 | 1   | 2  | 4  | 50 | 2 |
| RS06.450A3  | 0.6 | 1   | 3  | 4  | 50 | 2 |
| RS06.450A4  | 0.6 | 1   | 4  | 4  | 50 | 2 |
| RS06.450A5  | 0.6 | 1   | 5  | 4  | 50 | 2 |
| RS06.450A6  | 0.6 | 1   | 6  | 4  | 50 | 2 |
| RS06.450A8  | 0.6 | 1   | 8  | 4  | 50 | 2 |
| RS07.450A3  | 0.7 | 1   | 3  | 4  | 50 | 2 |
| RS07.450A4  | 0.7 | 1   | 4  | 4  | 50 | 2 |
| RS07.450A5  | 0.7 | 1   | 5  | 4  | 50 | 2 |
| RS07.450A6  | 0.7 | 1   | 6  | 4  | 50 | 2 |
| RS07.450A8  | 0.7 | 1   | 8  | 4  | 50 | 2 |
| RS07.450A10 | 0.7 | 1   | 10 | 4  | 50 | 2 |
| RS08.450A3  | 0.8 | 1.2 | 3  | 4  | 50 | 2 |
| RS08.450A4  | 0.8 | 1.2 | 4  | 4  | 50 | 2 |
| RS08.450A5  | 0.8 | 1.2 | 5  | 4  | 50 | 2 |
| RS08.450A6  | 0.8 | 1.2 | 6  | 4  | 50 | 2 |
| RS08.450A8  | 0.8 | 1.2 | 8  | 4  | 50 | 2 |
| RS08.450A10 | 0.8 | 1.2 | 10 | 4  | 50 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

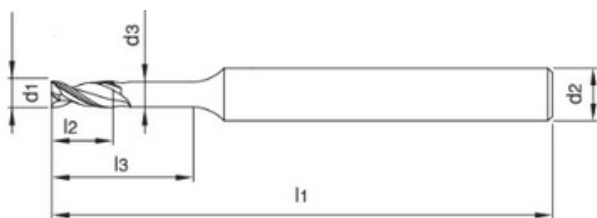
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

## Fresa Topo Reto Long Neck 2 Cortes

**55**  
HRC

Ângulo de  
Hélice  
**35**

Revestimento  
**TiSiN**



| Código      | d1  | lc | l2 | d2 | l1 | z |
|-------------|-----|----|----|----|----|---|
| RS1.450A5   | 1   | 2  | 5  | 4  | 50 | 2 |
| RS1.450A6   | 1   | 2  | 6  | 4  | 50 | 2 |
| RS1.450A8   | 1   | 2  | 8  | 4  | 50 | 2 |
| RS1.450A10  | 1   | 2  | 10 | 4  | 50 | 2 |
| RS1.450A12  | 1   | 2  | 12 | 4  | 50 | 2 |
| RS1.450A14  | 1   | 2  | 14 | 4  | 50 | 2 |
| RS1.450A16  | 1   | 2  | 16 | 4  | 50 | 2 |
| RS1.450A20  | 1   | 2  | 20 | 4  | 50 | 2 |
| RS15.450A6  | 1.5 | 3  | 6  | 4  | 50 | 2 |
| RS15.450A8  | 1.5 | 3  | 8  | 4  | 50 | 2 |
| RS15.450A10 | 1.5 | 3  | 10 | 4  | 50 | 2 |
| RS15.450A12 | 1.5 | 3  | 12 | 4  | 50 | 2 |
| RS15.450A14 | 1.5 | 3  | 14 | 4  | 50 | 2 |
| RS15.450A16 | 1.5 | 3  | 16 | 4  | 50 | 2 |
| RS15.450A20 | 1.5 | 3  | 20 | 4  | 50 | 2 |
| RS2.450A8   | 2   | 4  | 8  | 4  | 50 | 2 |
| RS2.450A10  | 2   | 4  | 10 | 4  | 50 | 2 |
| RS2.450A12  | 2   | 4  | 12 | 4  | 50 | 2 |
| RS2.450A14  | 2   | 4  | 14 | 4  | 50 | 2 |
| RS2.450A16  | 2   | 4  | 16 | 4  | 50 | 2 |
| RS2.450A20  | 2   | 4  | 20 | 4  | 50 | 2 |
| RS3.450A12  | 3   | 5  | 12 | 4  | 50 | 2 |
| RS3.450A16  | 3   | 5  | 16 | 4  | 50 | 2 |
| RS3.450A20  | 3   | 5  | 20 | 4  | 50 | 2 |
| RS3.450A12  | 3   | 5  | 12 | 6  | 50 | 2 |
| RS3.650A16  | 3   | 5  | 16 | 6  | 50 | 2 |
| RS3.650A20  | 3   | 5  | 20 | 6  | 50 | 2 |
| RS3.675A26  | 3   | 5  | 26 | 6  | 75 | 2 |
| RS3.675A30  | 3   | 5  | 30 | 6  | 75 | 2 |
| RS4.650A16  | 4   | 6  | 16 | 6  | 50 | 2 |
| RS4.650A20  | 4   | 6  | 20 | 6  | 50 | 2 |
| RS4.675A26  | 4   | 6  | 26 | 6  | 75 | 2 |
| RS4.675A30  | 4   | 6  | 30 | 6  | 75 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           |          |

● Adequado

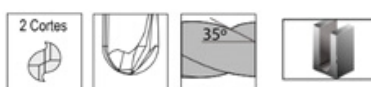
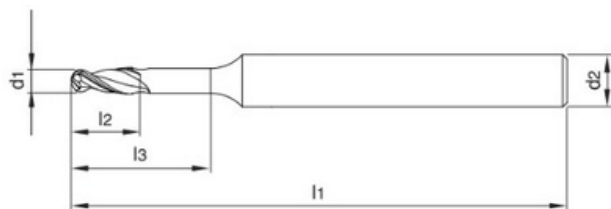
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Esférico Long Neck 2 Cortes

55  
HRC

Ângulo de  
Hélice  
35

Revestimento  
TiSiN



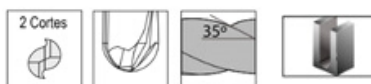
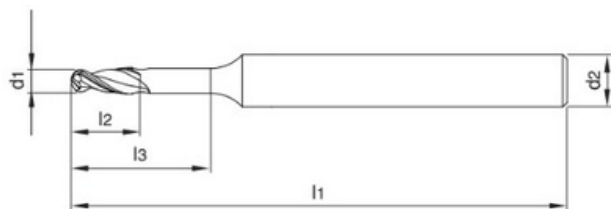
| Código      | d1    | lc  | l2 | d2 | l1 | z |
|-------------|-------|-----|----|----|----|---|
| RS01.450A1  | R0.1  | 0.3 | 1  | 4  | 50 | 2 |
| RS01.450A2  | R0.1  | 0.3 | 2  | 4  | 50 | 2 |
| RS015.450A1 | R0.15 | 0.6 | 1  | 4  | 50 | 2 |
| RS015.450A2 | R0.15 | 0.6 | 2  | 4  | 50 | 2 |
| RS015.450A3 | R0.15 | 0.6 | 3  | 4  | 50 | 2 |
| RS02.450A2  | R0.2  | 0.6 | 2  | 4  | 50 | 2 |
| RS02.450A3  | R0.2  | 0.6 | 3  | 4  | 50 | 2 |
| RS02.450A4  | R0.2  | 0.6 | 4  | 4  | 50 | 2 |
| RS02.450A6  | R0.2  | 0.6 | 6  | 4  | 50 | 2 |
| RS025.450A2 | R0.25 | 0.8 | 2  | 4  | 50 | 2 |
| RS025.450A3 | R0.25 | 0.8 | 3  | 4  | 50 | 2 |
| RS025.450A4 | R0.25 | 0.8 | 4  | 4  | 50 | 2 |
| RS025.450A5 | R0.25 | 0.8 | 5  | 4  | 50 | 2 |
| RS025.450A6 | R0.25 | 0.8 | 6  | 4  | 50 | 2 |
| RS025.450A8 | R0.25 | 0.8 | 8  | 4  | 50 | 2 |
| RS03.450A2  | R0.3  | 1   | 2  | 4  | 50 | 2 |
| RS03.450A3  | R0.3  | 1   | 3  | 4  | 50 | 2 |
| RS03.450A4  | R0.3  | 1   | 4  | 4  | 50 | 2 |
| RS03.450A5  | R0.3  | 1   | 5  | 4  | 50 | 2 |
| RS03.450A6  | R0.3  | 1   | 6  | 4  | 50 | 2 |
| RS03.450A8  | R0.3  | 1   | 8  | 4  | 50 | 2 |
| RS04.450A3  | R0.4  | 1.2 | 3  | 4  | 50 | 2 |
| RS04.450A4  | R0.4  | 1.2 | 4  | 4  | 50 | 2 |
| RS04.450A5  | R0.4  | 1.2 | 5  | 4  | 50 | 2 |
| RS04.450A6  | R0.4  | 1.2 | 6  | 4  | 50 | 2 |
| RS04.450A8  | R0.4  | 1.2 | 8  | 4  | 50 | 2 |
| RS04.450A10 | R0.4  | 1.2 | 10 | 4  | 50 | 2 |
| RS05.450A5  | R0.5  | 2   | 5  | 4  | 50 | 2 |
| RS05.450A6  | R0.5  | 2   | 6  | 4  | 50 | 2 |
| RS05.450A8  | R0.5  | 2   | 8  | 4  | 50 | 2 |
| RS05.450A10 | R0.5  | 2   | 10 | 4  | 50 | 2 |
| RS05.450A12 | R0.5  | 2   | 12 | 4  | 50 | 2 |
| RS05.450A14 | R0.5  | 2   | 14 | 4  | 50 | 2 |
| RS05.450A16 | R0.5  | 2   | 16 | 4  | 50 | 2 |
| RS05.450A20 | R0.5  | 2   | 20 | 4  | 50 | 2 |

# Fresa Topo Esférico Long Neck 2 Cortes

55  
HRC

Ângulo de  
Hélice  
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Revestimento  
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| Código       | d1    | lc | l2 | d2 | l1 | z |
|--------------|-------|----|----|----|----|---|
| RS075.450A6  | R0.75 | 3  | 6  | 4  | 50 | 2 |
| RS075.450A8  | R0.75 | 3  | 8  | 4  | 50 | 2 |
| RS075.450A10 | R0.75 | 3  | 10 | 4  | 50 | 2 |
| RS075.450A12 | R0.75 | 3  | 12 | 4  | 50 | 2 |
| RS075.450A14 | R0.75 | 3  | 14 | 4  | 50 | 2 |
| RS075.450A16 | R0.75 | 3  | 16 | 4  | 50 | 2 |
| RS075.45020  | R0.75 | 3  | 20 | 4  | 50 | 2 |
| RS10.450A8   | R1    | 4  | 8  | 4  | 50 | 2 |
| RS10.450A10  | R1    | 4  | 10 | 4  | 50 | 2 |
| RS10.450A12  | R1    | 4  | 12 | 4  | 50 | 2 |
| RS10.450A14  | R1    | 4  | 14 | 4  | 50 | 2 |
| RS10.450A16  | R1    | 4  | 16 | 4  | 50 | 2 |
| RS10.450A20  | R1    | 4  | 20 | 4  | 50 | 2 |
| RS15.450A12  | R1.5  | 5  | 12 | 4  | 50 | 2 |
| RS15.450A16  | R1.5  | 5  | 16 | 4  | 50 | 2 |
| RS15.450A20  | R1.5  | 5  | 20 | 4  | 50 | 2 |
| RS15.450A12  | R1.5  | 5  | 12 | 6  | 50 | 2 |
| RS15.450A16  | R1.5  | 5  | 16 | 6  | 50 | 2 |
| RS15.450AA20 | R1.5  | 5  | 20 | 6  | 50 | 2 |
| RS15.675A26  | R1.5  | 5  | 26 | 6  | 75 | 2 |
| RS15.675A30  | R1.5  | 5  | 30 | 6  | 75 | 2 |
| RS20.650A16  | R2    | 6  | 16 | 6  | 50 | 2 |
| RS20.650A20  | R2    | 6  | 20 | 6  | 50 | 2 |
| RS20.675A26  | R2    | 6  | 26 | 6  | 75 | 2 |
| RS20.675A30  | R2    | 6  | 30 | 6  | 75 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

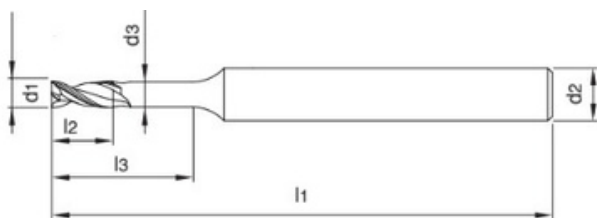
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

## Fresa Topo Reto Long Neck 2 Cortes

**65**  
HRC

Ângulo de  
Hélice  
**35**

Revestimento  
AlTiSiN



| Código      | d1  | lc  | l2 | d2 | l1 | z |
|-------------|-----|-----|----|----|----|---|
| RS02.450A1  | 0.2 | 0.3 | 1  | 4  | 50 | 2 |
| RS02.450A2  | 0.2 | 0.3 | 2  | 4  | 50 | 2 |
| RS03.450A1  | 0.3 | 0.6 | 1  | 4  | 50 | 2 |
| RS03.450A2  | 0.3 | 0.6 | 2  | 4  | 50 | 2 |
| RS03.450A3  | 0.3 | 0.6 | 3  | 4  | 50 | 2 |
| RS04.450A2  | 0.4 | 0.6 | 2  | 4  | 50 | 2 |
| RS04.450A3  | 0.4 | 0.6 | 3  | 4  | 50 | 2 |
| RS04.450A4  | 0.4 | 0.6 | 4  | 4  | 50 | 2 |
| RS04.450A6  | 0.4 | 0.6 | 6  | 4  | 50 | 2 |
| RS05.450A2  | 0.5 | 0.8 | 2  | 4  | 50 | 2 |
| RS05.450A3  | 0.5 | 0.8 | 3  | 4  | 50 | 2 |
| RS05.450A4  | 0.5 | 0.8 | 4  | 4  | 50 | 2 |
| RS05.450A5  | 0.5 | 0.8 | 5  | 4  | 50 | 2 |
| RS05.450A6  | 0.5 | 0.8 | 6  | 4  | 50 | 2 |
| RS05.450A8  | 0.5 | 0.8 | 8  | 4  | 50 | 2 |
| RS06.450A2  | 0.6 | 1   | 2  | 4  | 50 | 2 |
| RS06.450A3  | 0.6 | 1   | 3  | 4  | 50 | 2 |
| RS06.450A4  | 0.6 | 1   | 4  | 4  | 50 | 2 |
| RS06.450A5  | 0.6 | 1   | 5  | 4  | 50 | 2 |
| RS06.450A6  | 0.6 | 1   | 6  | 4  | 50 | 2 |
| RS06.450A8  | 0.6 | 1   | 8  | 4  | 50 | 2 |
| RS07.450A3  | 0.7 | 1   | 3  | 4  | 50 | 2 |
| RS07.450A4  | 0.7 | 1   | 4  | 4  | 50 | 2 |
| RS07.450A5  | 0.7 | 1   | 5  | 4  | 50 | 2 |
| RS07.450A6  | 0.7 | 1   | 6  | 4  | 50 | 2 |
| RS07.450A8  | 0.7 | 1   | 8  | 4  | 50 | 2 |
| RS07.450A10 | 0.7 | 1   | 10 | 4  | 50 | 2 |
| RS08.450A3  | 0.8 | 1.2 | 3  | 4  | 50 | 2 |
| RS08.450A4  | 0.8 | 1.2 | 4  | 4  | 50 | 2 |
| RS08.450A5  | 0.8 | 1.2 | 5  | 4  | 50 | 2 |
| RS08.450A6  | 0.8 | 1.2 | 6  | 4  | 50 | 2 |
| RS08.450A8  | 0.8 | 1.2 | 8  | 4  | 50 | 2 |
| RS08.450A10 | 0.8 | 1.2 | 10 | 4  | 50 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

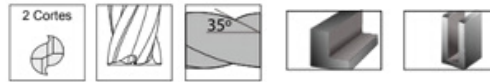
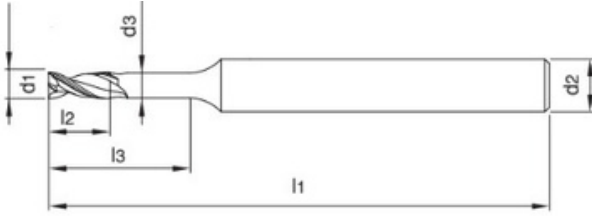
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Long Neck 2 Cortes

65  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiSiN



| Código      | d1  | lc | l2 | d2 | l1 | z |
|-------------|-----|----|----|----|----|---|
| RS1.450A5   | 1   | 2  | 5  | 4  | 50 | 2 |
| RS1.450A6   | 1   | 2  | 6  | 4  | 50 | 2 |
| RS1.450A8   | 1   | 2  | 8  | 4  | 50 | 2 |
| RS1.450A10  | 1   | 2  | 10 | 4  | 50 | 2 |
| RS1.450A12  | 1   | 2  | 12 | 4  | 50 | 2 |
| RS1.450A14  | 1   | 2  | 14 | 4  | 50 | 2 |
| RS1.450A16  | 1   | 2  | 16 | 4  | 50 | 2 |
| RS1.450A20  | 1   | 2  | 20 | 4  | 50 | 2 |
| RS15.450A6  | 1.5 | 3  | 6  | 4  | 50 | 2 |
| RS15.450A8  | 1.5 | 3  | 8  | 4  | 50 | 2 |
| RS15.450A10 | 1.5 | 3  | 10 | 4  | 50 | 2 |
| RS15.450A12 | 1.5 | 3  | 12 | 4  | 50 | 2 |
| RS15.450A14 | 1.5 | 3  | 14 | 4  | 50 | 2 |
| RS15.450A16 | 1.5 | 3  | 16 | 4  | 50 | 2 |
| RS15.450A20 | 1.5 | 3  | 20 | 4  | 50 | 2 |
| RS2.450A8   | 2   | 4  | 8  | 4  | 50 | 2 |
| RS2.450A10  | 2   | 4  | 10 | 4  | 50 | 2 |
| RS2.450A12  | 2   | 4  | 12 | 4  | 50 | 2 |
| RS2.450A14  | 2   | 4  | 14 | 4  | 50 | 2 |
| RS2.450A16  | 2   | 4  | 16 | 4  | 50 | 2 |
| RS2.450A20  | 2   | 4  | 20 | 4  | 50 | 2 |
| RS3.450A12  | 3   | 5  | 12 | 4  | 50 | 2 |
| RS3.450A16  | 3   | 5  | 16 | 4  | 50 | 2 |
| RS3.450A20  | 3   | 5  | 20 | 4  | 50 | 2 |
| RS3.450A12  | 3   | 5  | 12 | 6  | 50 | 2 |
| RS3.450A16  | 3   | 5  | 16 | 6  | 50 | 2 |
| RS3.6.50A20 | 3   | 5  | 20 | 6  | 50 | 2 |
| RS3.675A26  | 3   | 5  | 26 | 6  | 75 | 2 |
| RS3.675A30  | 3   | 5  | 30 | 6  | 75 | 2 |
| RS4.6.50A16 | 4   | 6  | 16 | 6  | 50 | 2 |
| RS4.675A20  | 4   | 6  | 20 | 6  | 50 | 2 |
| RS4.675A26  | 4   | 6  | 26 | 6  | 75 | 2 |
| RS4.675A30  | 4   | 6  | 30 | 6  | 75 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

● Adequado

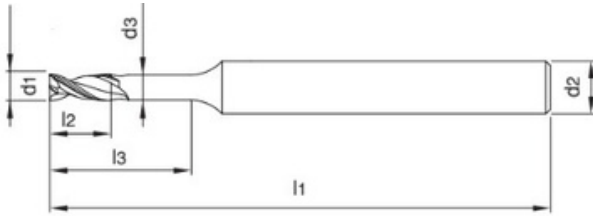
Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm

# Fresa Topo Reto Long Neck 2 Cortes

65  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiSiN



| Código      | d1    | lc  | l2 | d2 | l1 | z |
|-------------|-------|-----|----|----|----|---|
| RS01.450A1  | R0.1  | 0.3 | 1  | 4  | 50 | 2 |
| RS01.450A2  | R0.1  | 0.3 | 2  | 4  | 50 | 2 |
| RS015.450A1 | R0.15 | 0.6 | 1  | 4  | 50 | 2 |
| RS015.450A2 | R0.15 | 0.6 | 2  | 4  | 50 | 2 |
| RS015.450A3 | R0.15 | 0.6 | 3  | 4  | 50 | 2 |
| RS02.450A2  | R0.2  | 0.6 | 2  | 4  | 50 | 2 |
| RS02.450A3  | R0.2  | 0.6 | 3  | 4  | 50 | 2 |
| RS02.450A4  | R0.2  | 0.6 | 4  | 4  | 50 | 2 |
| RS02.450A6  | R0.2  | 0.6 | 6  | 4  | 50 | 2 |
| RS025.450A2 | R0.25 | 0.8 | 2  | 4  | 50 | 2 |
| RS025.450A3 | R0.25 | 0.8 | 3  | 4  | 50 | 2 |
| RS025.450A4 | R0.25 | 0.8 | 4  | 4  | 50 | 2 |
| RS025.450A5 | R0.25 | 0.8 | 5  | 4  | 50 | 2 |
| RS025.450A6 | R0.25 | 0.8 | 6  | 4  | 50 | 2 |
| RS025.450A8 | R0.25 | 0.8 | 8  | 4  | 50 | 2 |
| RS03.450A2  | R0.3  | 1   | 2  | 4  | 50 | 2 |
| RS03.450A3  | R0.3  | 1   | 3  | 4  | 50 | 2 |
| RS03.450A4  | R0.3  | 1   | 4  | 4  | 50 | 2 |
| RS03.450A5  | R0.3  | 1   | 5  | 4  | 50 | 2 |
| RS03.450A6  | R0.3  | 1   | 6  | 4  | 50 | 2 |
| RS03.450A8  | R0.3  | 1   | 8  | 4  | 50 | 2 |
| RS04.450A3  | R0.4  | 1.2 | 3  | 4  | 50 | 2 |
| RS04.450A4  | R0.4  | 1.2 | 4  | 4  | 50 | 2 |
| RS04.450A5  | R0.4  | 1.2 | 5  | 4  | 50 | 2 |
| RS04.450A6  | R0.4  | 1.2 | 6  | 4  | 50 | 2 |
| RS04.450A8  | R0.4  | 1.2 | 8  | 4  | 50 | 2 |
| RS04.450A10 | R0.4  | 1.2 | 10 | 4  | 50 | 2 |
| RS05.450A5  | R0.5  | 2   | 5  | 4  | 50 | 2 |
| RS05.450A6  | R0.5  | 2   | 6  | 4  | 50 | 2 |
| RS05.450A8  | R0.5  | 2   | 8  | 4  | 50 | 2 |
| RS05.450A10 | R0.5  | 2   | 10 | 4  | 50 | 2 |
| RS05.450A12 | R0.5  | 2   | 12 | 4  | 50 | 2 |
| RS05.450A14 | R0.5  | 2   | 14 | 4  | 50 | 2 |
| RS05.450A16 | R0.5  | 2   | 16 | 4  | 50 | 2 |
| RS05.450A20 | R0.5  | 2   | 20 | 4  | 50 | 2 |

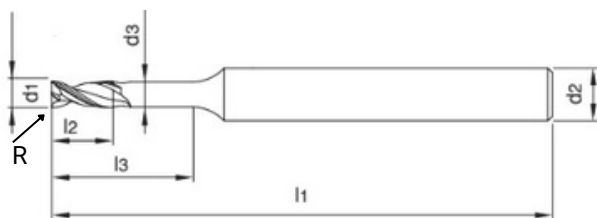


# Fresa Topo Reto Long Neck 2 Cortes

65  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiSiN



| Código       | d1    | lc | l2 | d2 | l1 | z |
|--------------|-------|----|----|----|----|---|
| RS075.450A6  | R0.75 | 3  | 6  | 4  | 50 | 2 |
| RS075.450A8  | R0.75 | 3  | 8  | 4  | 50 | 2 |
| RS075.450A10 | R0.75 | 3  | 10 | 4  | 50 | 2 |
| RS075.450A12 | R0.75 | 3  | 12 | 4  | 50 | 2 |
| RS075.450A14 | R0.75 | 3  | 14 | 4  | 50 | 2 |
| RS075.450A16 | R0.75 | 3  | 16 | 4  | 50 | 2 |
| RS075.450A20 | R0.75 | 3  | 20 | 4  | 50 | 2 |
| RS10.450A8   | R1    | 4  | 8  | 4  | 50 | 2 |
| RS10.450A10  | R1    | 4  | 10 | 4  | 50 | 2 |
| RS10.450A12  | R1    | 4  | 12 | 4  | 50 | 2 |
| RS10.450A14  | R1    | 4  | 14 | 4  | 50 | 2 |
| RS10.450A16  | R1    | 4  | 16 | 4  | 50 | 2 |
| RS10.450A20  | R1    | 4  | 20 | 4  | 50 | 2 |
| RS15.450A12  | R1.5  | 5  | 12 | 4  | 50 | 2 |
| RS15.450A16  | R1.5  | 5  | 16 | 4  | 50 | 2 |
| RS15.450A20  | R1.5  | 5  | 20 | 4  | 50 | 2 |
| RS15.650A12  | R1.5  | 5  | 12 | 6  | 50 | 2 |
| RS15.65A16   | R1.5  | 5  | 16 | 6  | 50 | 2 |
| RS15.65A20   | R1.5  | 5  | 20 | 6  | 50 | 2 |
| RS15.675A26  | R1.5  | 5  | 26 | 6  | 75 | 2 |
| RS15.675A30  | R1.5  | 5  | 30 | 6  | 75 | 2 |
| RS20.650A16  | R2    | 6  | 16 | 6  | 50 | 2 |
| RS20.650A20  | R2    | 6  | 20 | 6  | 50 | 2 |
| RS20.675A26  | R2    | 6  | 26 | 6  | 75 | 2 |
| RS20.675A30  | R2    | 6  | 30 | 6  | 75 | 2 |

| Aplicação      |              |               |                  |               |             |          |
|----------------|--------------|---------------|------------------|---------------|-------------|----------|
| Aço Endurecido | Ligas de Aço | Ferro Fundido | Liga de Alumínio | Liga de Cobre | Aço Carbono | Aço Inox |
| ●              | ●            | ●             |                  |               | ●           | ●        |

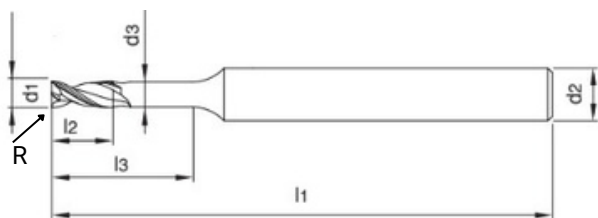
● Adequado

# Fresa Topo Reto Long Neck 2 Cortes

65  
HRC

Ângulo de  
Hélice  
35

Revestimento  
AlTiSiN



| Código          | d1  | lc | l2 | d2 | l1 | R   |
|-----------------|-----|----|----|----|----|-----|
| 1RS0.1.450A4    | 1   | 2  | 4  | 4  | 50 | 0.1 |
| 1RS0.1.450A6    | 1   | 2  | 6  | 4  | 50 | 0.1 |
| 1RS0.1.450A8    | 1   | 2  | 8  | 4  | 50 | 0.1 |
| 1RS0.2.450A4    | 1   | 2  | 4  | 4  | 50 | 0.2 |
| 1RS0.2.450A6    | 1   | 2  | 6  | 4  | 50 | 0.2 |
| 1RS0.2.450A8    | 1   | 2  | 8  | 4  | 50 | 0.2 |
| 1RS0.2.450A10   | 1   | 2  | 10 | 4  | 50 | 0.2 |
| 1.5RS0.1.450A6  | 1.5 | 3  | 6  | 4  | 50 | 0.1 |
| 1.5RS0.1.450A8  | 1.5 | 3  | 8  | 4  | 50 | 0.1 |
| 1.5RS0.1.450A10 | 1.5 | 3  | 10 | 4  | 50 | 0.1 |
| 1.5RS0.2.450A6  | 1.5 | 3  | 6  | 4  | 50 | 0.2 |
| 1.5RS0.2.450A8  | 1.5 | 3  | 8  | 4  | 50 | 0.2 |
| 1.5RS0.2.450A10 | 1.5 | 3  | 10 | 4  | 50 | 0.2 |
| 1.5RS0.2.450A12 | 1.5 | 3  | 12 | 4  | 50 | 0.2 |
| 2RS0.1.450A8    | 2   | 4  | 8  | 4  | 50 | 0.1 |
| 2RS0.1.450A10   | 2   | 4  | 10 | 4  | 50 | 0.1 |
| 2RS0.1.450A12   | 2   | 4  | 12 | 4  | 50 | 0.1 |
| 2RS0.1.450A16   | 2   | 4  | 16 | 4  | 50 | 0.1 |
| 2RS0.2.450A8    | 2   | 4  | 8  | 4  | 50 | 0.2 |
| 2RS0.2.450A10   | 2   | 4  | 10 | 4  | 50 | 0.2 |
| 2RS0.2.450A12   | 2   | 4  | 12 | 4  | 50 | 0.2 |
| 2RS0.2.450A16   | 2   | 4  | 16 | 4  | 50 | 0.2 |
| 3RS0.2.450A12   | 3   | 6  | 12 | 4  | 50 | 0.2 |
| 3RS0.2.450A16   | 3   | 6  | 16 | 4  | 50 | 0.2 |
| 3RS0.2.450A20   | 3   | 6  | 20 | 4  | 50 | 0.2 |
| 3RS0.5.450A12   | 3   | 5  | 12 | 4  | 50 | 0.5 |
| 3RS0.5.450A16   | 3   | 5  | 16 | 4  | 50 | 0.5 |
| 3RS0.5.450A20   | 3   | 5  | 20 | 4  | 50 | 0.5 |
| 3RS0.2.650A16   | 3   | 5  | 16 | 6  | 50 | 0.2 |
| 3RS0.2.650A20   | 3   | 5  | 20 | 6  | 50 | 0.2 |
| 3RS0.5.650A16   | 3   | 5  | 16 | 6  | 50 | 0.5 |
| 3RS0.5.650A20   | 3   | 5  | 20 | 6  | 50 | 0.5 |
| 3RS0.5.675A26   | 3   | 5  | 26 | 6  | 75 | 0.5 |
| 3RS0.5.675A30   | 3   | 5  | 30 | 6  | 75 | 0.5 |
| 4RS0.2.650A16   | 4   | 6  | 16 | 6  | 50 | 0.2 |
| 4RS0.2.650A20   | 4   | 6  | 20 | 6  | 50 | 0.2 |
| 4RS0.5.650A16   | 4   | 6  | 16 | 6  | 50 | 0.5 |
| 4RS0.5.650A20   | 4   | 6  | 20 | 6  | 50 | 0.5 |
| 4RS0.5.675A26   | 4   | 6  | 26 | 6  | 75 | 0.5 |
| 4RS0.5.675A30   | 4   | 6  | 30 | 6  | 75 | 0.5 |

Tolerâncias: D≤6: 0,010 - 0,030mm | D≤10: 0.015 - 0.040 | D≤20: 0,020mm -0,050mm



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| CNPJ: 05.606.833/0001-14 |

