

HARTMETALL ESTECH AG
presents

Cemented Carbide EDM Preforms for Wire-cut and
Die Sinking Electrical Discharge Machining
with Corrosion Inhibitor

EXPRESS LINE OF 6 DAYS



2014-05-20

> Dimensions L x B x H and Ø x H - exactly to customer need

> **EXPRESS LINE IN 6 DAYS**

for sintered blocks and cylinders, raw sintered, without starting holes.

> These preforms can also be manufactured with starting holes according to your drawings, and/or flat grinded on one or more faces.

Delivery +2 to +4 work days according execution.

Material specification	Cemented carbide grades		
	RCR17	RCR24	RCR30
WC grain size	2.5 µm	2.5 µm	3.5 µm
WC content %w/w	90.5	87.0	84.0
Cobalt content %w/w	8.5	12.0	15.0
Other constituents % w/w	1.0	1.0	1.0
Hardness HV30	1600	1400	1200
Fracture toughness N/mm ² .m ^{1/2}	10.0	13.0	17.5
Transverse rupture strength N/mm ²	2900	3200	3400

> Besides these three special EDM grades, we can also deliver other cemented carbide grades which contain anti-corrosive constituents and are well suitable for EDM processes.

Below you find a table with recommendations of cemented carbide grades for cutting and punching dies, depending on the tensile strength / toughness and the thickness of the metal sheets to be worked.

Please contact us if you need any further information and advice.

Cemented carbide grades

Thickness of metal sheet mm	Tensile strength <500 N/mm ²	Tensile strength 500-900 N/mm ²	Tensile strength 900-1400 N/mm ²	Tensile strength > 1400 N/mm ²
>2.0	RCR24	RCR24 / RCR30	RCR30	RCR30 / RB15-H
1.5 - 2.0	RCR24	RCR24 / RCR30	RCR30	RCR30
0.8 - 1.5	RCR17 / RCR24	RCR24	RCR24 / RCR30	RCR24 / RCR30
0.5 - 0.8	RCR17	RCR17	RCR24	RCR24
0.1 - 0.5	RX10-NG / RX12-UF-NG	RX10-NG	RCR17	RCR24
<0.1	RX7-NG / RX8-UF-NG	RX12-UF-NG / RX10-NG	RX12-UF-NG / RX10-NG	RX15-NG / RCR17

> sheet thickness

> Tensile strength/toughness of the sheet

> Typical microstructure of RCR24.

