

# POLIGRAT-PRODUCTINFORMATION

## CarboChem C 600

Chemical Polishing and Deburring Process for Mild Steel



### Properties and Effect

**CarboChem C 600** provides the possibility of fast and reliable deburring, de-flaking and smoothing at the entire surface of mild steel parts. Crack seeds and metallic sticking metal flakes will be removed, even they are located at the inside of the goods. The lifetime of mechanically high loaded parts, such like springs or pressurized tubes are increased significantly.

### Economics

The high metal absorbing capacity (up to 70 g Fe/l) in combination with its high metal removal speed allows very short process times at minimized chemical consumption. The removal rate can be adjusted in the range from 0.5 – 5 µm/min.

### Application

**CarboChem C 600** is an immersion process, although it can be applied in pump flow process too. The parts can be processed either on jigs, in baskets or as bulk goods in rotary barrels.

#### Process sequence:

- Degreasing in hot alkaline
- Derusting/activation in POLINOX Besta S
- Smoothing and deburring in Carbochem C 600
- Temporary corrosion protection in CarboPassiv 6 or Dewatering Fluid

### Process stability

Smoothing and deburring are stable within the working range and nearly independent of the metal concentration. The loss of oxygen during production and short no working periods is minimized. Under normal working conditions the dosing of concentrate C 600 K is sufficient to compensate the consumption by the metal removal. Automatic dosing provides the most effective use of **CarboChem C 600** keeping the metal concentration at its maximum limits.

### Environmental and waste handling

The process bath is not to be classified as toxic up to a specific removal rate of 2.2 µm/min, due to the low concentration of HF. The high efficiency reduces the chemical consumption significantly, protects the environment and saves resources.

**CarboChem C 600** does not contain Ammonia compounds and can be handled in conventional neutralization waste water plants. The electrolyte and the rinse water from the process are acidic and contain the dissolved metal. They need to be treated and disposed of according to the statutory provisions and regulations.



### Technical data

Density:	1.00 - 1.10 g/ml
Application:	dissolved
Working temperature:	20 - 30 °C
Process time:	2 - 15 min.

### Supply

#### Fluid concentrate:

▪ <b>CarboChem</b>	C 600 K	C 600 SK
▪ Single-use canr 30 kg	(25.8 l)	(260 l)
▪ Barrel	-	200 l
▪ IBC	1,000 l	1,000 l

#### Mixing for 100 l ready to use electrolyte:

▪ <b>CarboChem C 600</b>		
DI water	80,0 l	80,0 l
hydrogen peroxide (35%)	15,0 l	17,5 l
<b>CarboChem C 600 K</b>	5,0 l	
<b>CarboChem C 600 SK</b>		2,5 l

### Your Advantages

- best economical process
- rapid deburring
- low process temperature
- resource saving