



CR6 UNIT

Ensure EHS working standards on ECM (Electrochemical) machines.

As components become more advanced by the day, corrosion resistance is basically mandatory across all market segments, therefore a strong growth of chromium is required.

During ECM processes of chromium alloyed materials, harmful decomposition products could be generated, which has to be reduced safely to ensure proper EHS working conditions.

The CR6 reduction unit is a standalone unit that reduces the generated hexavalent chromium (CrO_4^{2-}) under a pre-set value by adding a reduction solvent to non-harmful 3-valent chromium hydroxide.

FEATURES and BENEFITS

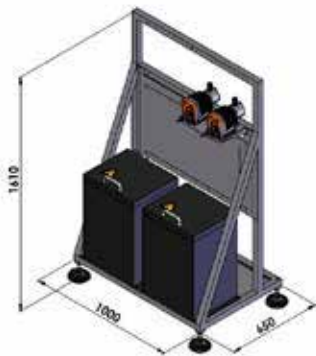
- + **Ensure proper working conditions and meets EHS working standards**
Reduces process-generated hexavalent chromium spread to the non-toxic 3-valent chromium by adding reduction solvents to the electrolyte tank.
- + **Minimized running costs**
Cost-efficient.
Reduction under pH-neutral conditions.
Ensures anti-contamination.
- + **Standalone unit**
Fully automated standalone unit used to drop process-generated hexavalent chromium under a pre-set value. Easy to implement/retrofit on each type of ECM machine, no matter the manufacturer.
- + **Proven technology**
Robust and reliable system for tough working conditions.



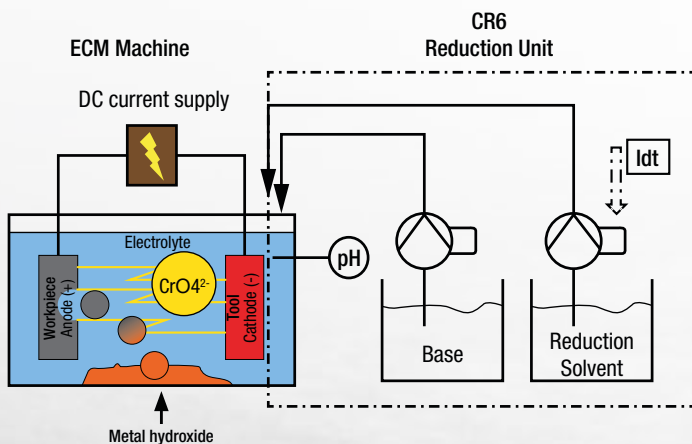
ECM CR6 UNIT



Standalone



ECLINE configuration



SYSTEM CONFIGURATION

Compact system design with few space requirements, and easy to transport. 1000 x 650 x 1610; 2830mm (W x D x H)

Unit consists of frame (stainless steel), control unit, dosing unit (reservoir, dosing pump, suction lance, and dosing valve) for base and reduction solvent, pH sensor (2x), and current measurement device.

Independent control unit.

Operator interface to define relevant parameters.

Machine light with extended tube for visual demonstration of machine status.

Consistent pH control.

Volume-controlled solvent dosing to ensure functionality of the reduction process (please note: manual control of CrO_4^{2-} concentration in the process is mandatory and should be applied by the operator on a weekly basis).

Media to be used:

Base: 30% sodium base (NaOH)
Reduction solvent: 17% FeSO_4

*Please note: solvent has to be completely solved in the tank.

Working conditions (at 18% alloys)

Maximum material removal: 3900 kAs/h
Maximum ampere (av): 1050 A

CONNECTION DATA • POWER

Power rating 230 VAC 1P/N/PE 50/60 Hz
Power requirement <5 kW

ACCESSORIES/OPTIONS

Integration kit available to adapt CR6 Reduction UNIT to non-Extrude Hone machines.

Chemicals to extend lifetime of reduction solvent.

Testing strips for CrO_4^{2-} .

All systems comply with the applicable EU Machinery Directive governing machine safety and bear the CE mark. They also comply with accident prevention and the VDE and VDI regulations, as well as the requirements concerning electromagnetic compatibility regulations.

