ISOCEM®

CrV

New family of case hardening steels with high hardenability

APPLICATION

- Case hardened components that are **quenched with low severity cooling fluids** (high pressure gases, oils...).
- Components that exhibit **distortions** after heat treatment.
- **Replacement of high alloyed grades** ensuring performance.

ADVANTAGES

Reduced distortions	Cost reduction	Mechanical characteristics ensured	Increased quality	Clean and ecological process
When gas quenching (GQ) the distortions generated in components are reduced.	Savings in raw material. Reduction of machining operations oriented to the correction of defects (grinding, straightening...).	Hardenability tailored to the component in order to ensure core mechanical requirements.	Uniform behaviour in heat treatment. Low segregation and fine grain size (> 7 ASTM). Absence of scale and intergranular oxidation (GQ).	Substitution of quenching oils by clean gases (N_2, He...). Process steps for components cleaning and oils recycling are eliminated.

APPLIED TECHNOLOGY:

- Combined process of **low pressure carburizing and gas quenching** at different pressures (5-20bar).
- Conventional **gas carburizing and oil quenching** processes.
- **Improved hardenability** by means of innovative chemical composition.
- Feasibility of machinability improvement: **MECAMAX® technologies**.