## Supplier of complete solutions in wear resistant and high yield strength steels

<table>
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<th>Grades</th>
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<td><strong>ABRASION</strong></td>
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<tr>
<td><strong>CREUSABRO® DUAL®</strong></td>
<td>An innovative grade with very high performance taking its inspiration from the chemistry of CREUSABRO® 8000® and being reinforced with titanium carbides. The ultimate solution for severe sliding abrasion combined with great impact. For applications where conventional water quenched steels (500 HB, 550 HB), hardfacing plates or hard-casting parts are traditionally implemented. 450 - 520 HB. Application: bucket liners for excavator, shovel, loader, dozer, cutting edges, truck body liners, wear parts for primary and secondary crushers, vibratory feeder liners...</td>
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<tr>
<td><strong>CREUSABRO® 8000®</strong></td>
<td>CREUSABRO® 8000® is a wear resistant steel that combines extreme resistance to abrasion together with a high level of toughness. The ability of this grade to work harden offers an increase of up to 45% service life compared to conventional 500 HB materials. 500 - 540 HB. Application: cement plant, quarrying, mining &amp; earth moving equipment, steel production, recycling plant...</td>
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<td><strong>CREUSABRO® 4800®</strong></td>
<td>CREUSABRO® 4800® is a wear resistant steel that combines extreme resistance to abrasion together with a high level of toughness. The ability of this grade to work harden offers an increase of up to 45% service life compared to conventional 400 HB materials. It also works at higher temperatures than standard abrasion steels, continuously at &gt;400 °C. 400 - 430 HB. Application: block moulds, cement plants, quarrying, mining &amp; earth moving equipment, steel production, recycling plant...</td>
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<tr>
<td>ABRAMAX Mu</td>
<td>Steel with good abrasion resistance, improved processability, heat resistance &lt;400 °C mechanical safeguards (use at room temperature), 270 - 350 HB. Application: steel multi-purpose in all areas requiring proper attire to wear.</td>
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<td><strong>DILLIDUR 500V</strong></td>
<td>A higher abrasion resistant water quenched plate than Dillidur 400 with a hardness of 500 HB and can be readily welded and fabricated: 450 - 530 HB. Application: earthmoving, excavator and loading equipment, buckets and edges, dredgers, conveyors, knives and shears, skip liners, recycling equipment...</td>
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<tr>
<td><strong>DILLIDUR 400V</strong></td>
<td>A water quenched abrasion resistant plate with a hardness of 400 HB and can be readily welded and fabricated. 370 - 430 HB. Application: earthmoving and loading equipment, buckets and edges, dredgers, conveyors, knives and shears, skip liners, recycling equipment, agricultural machinery...</td>
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<tr>
<td><strong>DILLIDUR IMPACT</strong></td>
<td>Dillidur Impact is a wear resistant steel with exceptionally high resistance to cracking. It has a nominal hardness of approximately 340 HBW in its delivered condition, and its outstanding mechanical properties are obtained by water quenching and subsequent tempering. Dillidur Impact is successfully applied where high resistance to abrasion is required together with very high toughness to resist impact wear 310 - 370 HB. Application: earthmoving and loading machines, cutting edges, buckets, shovels, grabs, scoops, breakers and knives...</td>
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<tr>
<td><strong>DURETAL 65</strong></td>
<td>High chromium carbide weld overlay plate, which offers high resistance to sliding abrasion under moderate impact conditions and temperatures between 450 and 650 °C. 58 to 62 HRC, ± 2 HRC.</td>
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<td><strong>DURETAL 35</strong></td>
<td>A carbon manganese (11 - 14%), hyper-quenched austenitic, non-magnetic, work hardening steel plate. Outstanding resistance to abrasion with frontal impacts or high compression 550 - 600 HB (after hardening). Application: impact and transfer plates (mines and quarries), liners (shot blasting cabinets), lock mechanism protection for security doors ...</td>
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<tr>
<td><strong>ROC Mn</strong></td>
<td>Wear resistant water quenched grade, which can be readily welded and fabricated. 450 - 550 HB</td>
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<tr>
<td><strong>ROC 500</strong></td>
<td>Wear resistant water quenched grade, which can be readily welded and fabricated. 370 - 430 HB. Application: general use for any parts subjected to abrasion</td>
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<tr>
<td><strong>ROC 400</strong></td>
<td>Abrasion-resistant steel from strip mill production. Excellent surface condition for a satisfactory appearance after painting. 340 - 440 HB. Application: general use for any parts subjected to abrasion</td>
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<td><strong>ROC 401</strong></td>
<td>Wear resistant standard plate, suitable for welding. 280 - 345 HB. Application: production of components for mining and quarrying.</td>
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<td><strong>ROC 250</strong></td>
<td>An economical wear resistant solution for simple cases of abrasion, good machinability. 200 - 260 HB. Application: general purpose grade for limited abrasion.</td>
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### Grades Details

#### ABRASION CORROSION

**COBRANOX 35**  
X3 Cr Ni 23-4 EN 10088-2  
WN°: 1.4363 / 1.4463  
Duplex stainless steel type, excellent corrosion resistance (equivalent to AISI 316) and good abrasion resistance (equivalent steel hardness 300 HB.) **260 HB.**  
**Application:** where abrasion and severe corrosion are combined.

**ABRACORR 600**  
Normalized steel particularly suited for resistance to combined abrasion & corrosion in wet environments. Abrasion resistance at temperatures up to 600 °C. **300 - 320 HB.**  
**Application:** steel, cement, sugar, mining, fertilizer production.

**COBRANOX 12**  
X2 Cr Ni 12 EN 10028  
WN°: 1.4003  
Ferritic stainless steel type. A technical and economic solution in the case of combined, limited abrasion & corrosion.  
**Application:** petrochemical, sugar refining, paper, mining and quarrying, agriculture...

**COR-TEN A**  
EN 10025-5  
Steel resistant to atmospheric corrosion.

#### HIGH YIELD STRENGTH

**S 690 QL / IMEX 700 EN 10025-6**  
S690QL is a high strength quenched and tempered structural steel, with excellent forming and welding properties.  
**Used for** weight saving and high stress components.  
**Application:** crane service, mining & earth moving equipment, agricultural equipment, material handling, bridges, trailers...

**DILLIMAX 1100**  
Steel with very high yield strength **1100 MPa** minimum.  
**Application:** welded components in mechanical structures, winches, cranes, conveyors...

**DILLIMAX 965**  
EN 10025-6  
Steel with very high yield strength **965 MPa** minimum.  
**Application:** welded components in mechanical structures, winches, cranes, conveyors, bridges...

**DILLIMAX 890**  
EN 10025-6  
Steel with very high yield strength **890 MPa** minimum.  
**Application:** welded components in mechanical structures, winches, cranes, conveyors, bridges...

**DILLIMAX 690**  
EN 10025-6  
High tensile steel **690 Mp** minimum.  
**Application:** all structural elements requiring strength and good resistance to fatigue...

**IMEX 960 (S 960 QL)**  
EN 10025-6  
Steel with very high yield strength **960 MPa**.

**IMEX 900 (S 890 QL)**  
EN 10025-6  
Steel with very high yield strength **890 MPa**.

**IMEX 701 (S 700 MC)**  
EN 10149-2  
High tensile steel, thermo-mechanically rolled. Good cold formability and weldability.  
**Application:** offers strength in the areas of automotive industry, lifting equipment, Construction...

**IMEX 501 (S 500 MC)**  
EN 10149-2  
High tensile steel, thermo-mechanically rolled.  
**Application:** rails, sleepers, reinforcing elements...

#### WEAR RESISTANT PRODUCTS

**ABRATUBE 400**  
Tubes and seamless elbows. Hardness: 400 HB.  
**Application:** transportation of quarry product, coal slurry, pulverized fuel systems, cement & wood chip conveyance...

**ABRATUBE 600**  
An induction heat treatment process produces a thick layer of **600 HB** on the inner surface of the pipe to provide ABRATUBE 600's wear resistant properties. The outer surface hardness at 300 HB adds to ABRATUBE 600's toughness.  
**Application:** transportation of quarry product, coal slurry, pulverized fuel systems, cement & wood chip conveyance...

### PROCESSING

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