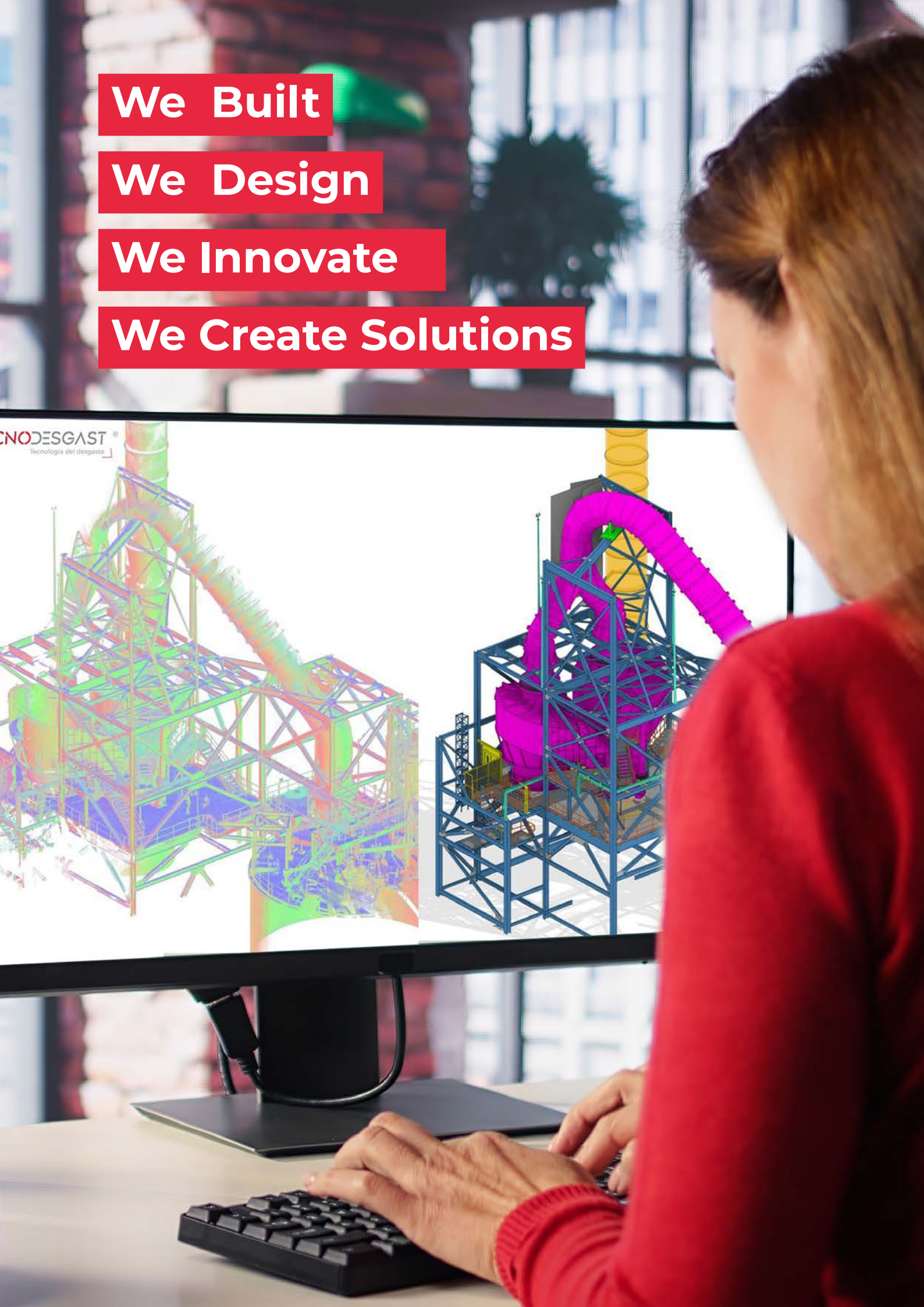
TECNODESGAST®

Anti-wear technology



WWW.TECNODESGAST.COM


We Built
We Design
We Innovate
We Create Solutions
CNODESGAST
Tecnología del desgaste

About us



At **Tecnodesgast**, we design and manufacture customised solutions for all types of equipment exposed to wear caused by abrasion, chemical attack, high temperatures or impact.

With **more than 40 years of experience**, we specialise in the identification, diagnosis and resolution of all forms of wear affecting industrial equipment.

We provide our customers with the most effective solutions, applying specific engineering techniques and carefully selected materials to optimise performance and extend service life.

Our goal is to respond every day to the specific needs of each customer, whether for large-scale installations or smaller, highly specialised applications.

Applications

The transport of bulk materials in various industries, such as the basic materials sector and other industrial fields, causes significant wear on installation components.

Each material handled in these industries has specific characteristics that directly affect the equipment involved. For this reason, every operation requires customised solutions adapted to its particular working conditions.

When wear interrupts industrial processes, the resulting losses can exceed the cost of replacement parts and repairs. In today's highly
competitive markets, this situation is no longer acceptable.

For this reason, it is essential to rely on effective solutions that provide reliable protection against wear and ensure continuous and efficient operation.



Services









Our methodology is based on close collaboration with our customers from the very first stage, allowing us to think broadly and boldly and to go beyond traditional surface engineering solutions.

We offer reliable partnerships built on trust, quality and full control of each project's specific requirements.

Our services include:

- Reverse engineering
- Wear monitoring
- Selection of the most suitable solution
- Design of components, lining of equipment and pipelines
- Custom manufacturing
- Storage of all order data for future replacements
- Supervision of installations until the component's optimum performance has been verified

Piping solutions

Hydraulic and pneumatic pipelines, as well as flexible hoses, are often subjected to extremely demanding conditions. When transporting abrasive materials such as ash, sand or grains, pipelines are exposed to high levels of stress. Even thick-walled steel or cast-iron pipes can show significant wear in a very short period of time.

To ensure long service life and optimum conveying performance, it is essential to line pipes, bends and hoses with wear-resistant materials.

Lining solutions

At Tecnodesgast, we offer a wide range of mineral, ceramic and metallic materials, as well as high-quality composites and engineering plastics.

This broad selection enables us to develop highly durable lining systems precisely adapted to each application.

Materials

COMPARATIVE TABLE OF WEAR RESISTANCE

Mild steel 120 Vickers		Product description	ABRASION Particle removal	IMPACT Cracking and breakage	CHEMICAL ATTACK Degradation of microestructure	HEAT °C Reduction of hardness	SLIDING Wear reduction through improved flow
			1	Media		180	
Tubes & linings	**ALUDES 1500®**	SINTERED ALUMINA wear resistant CERAMIC	80-100			1000	
Tubes & linings	**BASALDES 800®**	Cast BASALT	30-40			500	
Tubes & linings	**ZIRDES 2000®**	ZIRCONIA and Fused ALUMINA	50-70			1400	
Tubes & linings	**CARBUDES 2300®**	SILICON CARBIDE wear resistant CERAMIC	120-140			1400	
Tubes & linings	**DURCOP 1300®**	TUNGSTEN CARBIDE High-Strength Ceramic	70-90			600	
Tubos y Revestimiento	**ZIRALDES 1250®**	ZIRCONIA and sintericed ALUMINA	70-90			1000	
Plates	**INOXDES 210®**	15-17% Chrome	2-4			400	
Plates	**INOXDES 420®**	15-17% Chrome	8-10			400	
Tubes & Plates	**INOXDES 550®**	BIMETALLIC wear resistant stainless	20-25		Depending on the base materia	550	Depending on the finish
Tubes & Plates	**INOXDES 660®**	BIMETALLIC wear resistant stainless	30-40		Depending on the base materia	800	Depending on the finish
Tubes & Plates	**CROMDES 700®**	COMPLEX CARBIDE wear resistant hardfacing plates	25-30			500	
Plates	**CROMDES 700P®**		25-30			500	
Tubes & Plates	**CROMDES 800®**	COMPLEX CARBIDE wear resistant hardfacing plates	30-40			650	
Tubes & Plates	**CROMDES 850®**	COMPLEX CARBIDE wear resistant hardfacing plates	40-50			800	
Tubes & Plates	**CROMDES 950®**	COMPLEX CARBIDE wear resistant hardfacing plates	50-60			500	
Tubes & Plates	**TUNGDES 2300®**	TUNGSTEN CARBIDE wear resistant hardfacing plates	50-60			500	
Plates	**HARDES 400/450/500®**	Plates/pipes Cr Mn Mo	4-5			450	
Tubes	**HARDES 450/700®**	Cr Mn Mo Ni	25-30			250	
Chapa	**PLASTDES 100®**	High molecular density POLYMER	13-14			70	
Tubos y Chapa	**POLIDES 86/88/92®**	Wear resistant POLY-URETHANE plates	12-15			80	
Tubos	**TUBOFLEX 1500®**	FLEXIBLE PIPE of ALUDES 1500	70-90			120	

The comparative table of wear resistance should be used for guidance after prior selection of the most suitable type of material for the specific causes of wear: abrasion, impact, temperatures, chemical attack, etc.

TUBES

HARDES 450/700®

CROMDES 700/800/850/950®

BASALDES 800®

ALUDES 1500®

TUBOFLEX 650/1500®

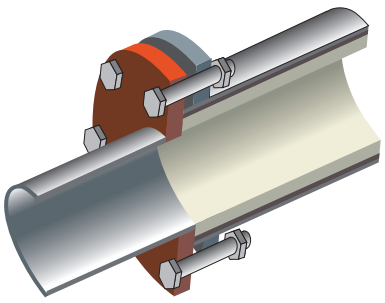
ZIRDES 2000®

CARBUDES 2300®

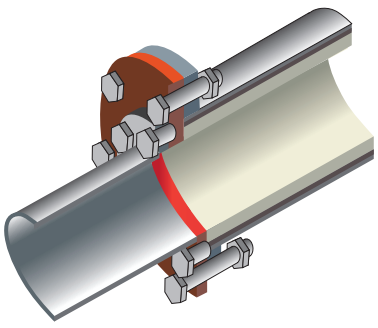
COUPLING SYSTEMS

We provide different coupling systems that allow safe and efficient connections between wear-resistant pipes, including:

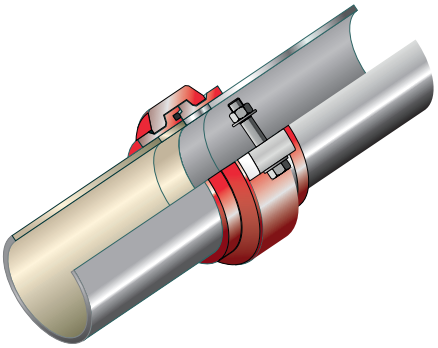
Conversion flnges



Intermediate flanges



Victaulic-type coupling systems



HARDES 450/700®

Wear-resistant steel piping alloyed for medium and heavy impact conditions.

TECHNICAL DATA

	HARDNESS VICKERS	ANALISYS				
HARDES 450®	≤ 450	C	Cr	Mn	Mo	-
HARDES 700®	≤ 700	C	Cr	Mn	Mo	Ni



INTERNAL BORE DIAMETERS

HARDES 450®	From 80 mm to 200 mm
HARDES 700®	From 80 mm to 150 mm

AVIABLE HARDES ELBOWS

Radius	750	1000	1500	2000	2500	3000
Angles	90°	90°	60°	45°	45°	30°
	60°	60°	45°	30°	30°	15°
	45°	45°	30°	15°	15°	--

CROMDES 700/800/850/950®

Bimetallic Pipes. High-strngth steel with excellent abrasion and impact resistance.

TECHNICAL DATA

HARDENESS (medium)	ANALISYS	OPERATING TEMPERATURE
de 700 a 950 Vickers	C-Cr-Mo-Nb-V-W-B	de 500 a 800°C



TUBES

INTERNAL BORE DIAMETERS	from 100 mm to 250 mm

AVIABLE CROMDES ELBOWS

Radius	500	750	1000	1500	2000	2500	3000
Angles	90°	90°	90°	60°	45°	45°	30°
	60°	60°	60°	45°	30°	30°	15°
	45°	45°	45°	30°	15°	15°	--

BASALDES 800®

Cast Basalt. This material provides excellent resistance to abrasion, chemical attack, and offers very good sliding properties.

TECHNICAL DATA

HARDNESS (Vickers)	DENSITY gr/cm³	ABRASION RESISTANCE	THERMAL CONDUCTIVITY	THERMAL EXPANSION	OPERATING TEMPERATURE
720-800	2,90	3-4 cm^3 / 50 cm^2 (máx.) (DIN 52108)	1,1-1,7 W/m.K	9 x 10^{-6} K^{-1} 2-400 °C	Normal: 400 °C (máx:600°C without abrupt changes)



TUBES

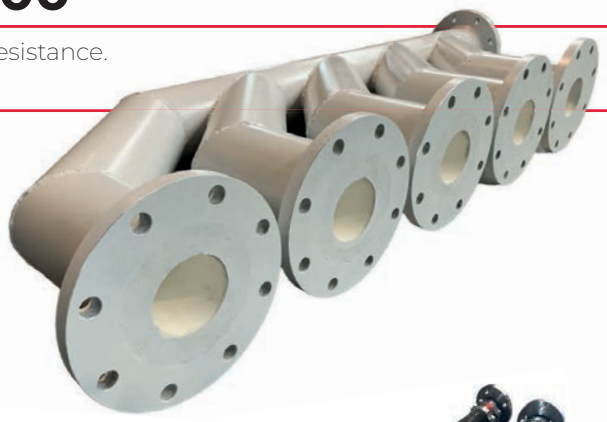
INTERNAL BORE DIAMETERS	from 25 mm to 610 mm

AVIABLE BASALDES ELBOWS

Radius	750	1000	1500	2000	2500	3000
Angles	90°	90°	60°	45°	45°	30°
	60°	60°	45°	30°	30°	15°
	45°	45°	30°	15°	15°	--

ALUDES 1500® TUBOFLEX 650/1500®

92% sintered alumina, versatile and long-lasting, suitable for high abrasion resistance.
It is also supplied in flexible hoses lined with alumina (Tuboflex).



TECHNICAL DATA

	COMPOSITION	HARDNESS (Vickers)	Op. Temp.	INTERNAL DIAMETERS
ALUDES 1500®	Al2 O3 92%	≤ 1500	1000°C máx	from 40 to 250 mm Large-diameter pipes with ceramic tile lining
TUBOFLEX 650®	Cr-Ni	≤ 650	400°C máx	de 20 a 150 mm
TUBOFLEX 1500®	Al2 O3 92%	≤ 1500	120°C máx	de 25 a 300 mm

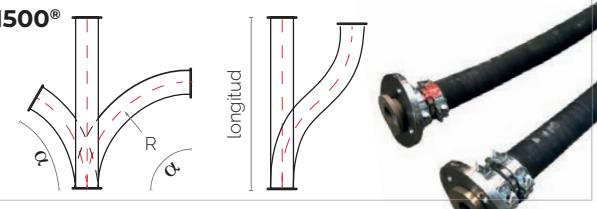
AVIABLE ALUDES ELBOWS

Radius	750	1000	1500	2000	2500	3000
Angles	90°	90°	60°	45°	45°	30°
	60°	60°	45°	30°	30°	15°
	45°	45°	30°	15°	15°	--

TUBOFLEX 650/1500®

$$L = \frac{R \cdot \alpha}{57.3}$$

Pipe length according to the desired angle and radius





ZIRDES 2000®

Fused alumina especially suitable for extremely severe abrasive-stress conditions involving high temperature and thermal shock.

TECHNICAL DATA

HARDNESS Vickers	DENSITY gr/cm³	ABRASION RESISTANCE	THERMAL CONDUCTIVITY	THERMAL EXPANSION	OPERATING TEMPERATURE
≤ 2000	3,5	0,75-1 cm³ / 50 cm² (máx.) (DIN 52108)	4,4 W/m.K	8 x 10⁻⁶ K⁻¹ 0-400 °C	Normal: 1400 °C (máx:)

TUBES

INTERNAL DIAMETERS	From 25 mm to 610 mm

AVIABLE ZIRDES ELBOWS

Radius	750	1000	1500	2000	2500	3000
Angles	90°	90°	60°	45°	45°	30°
	60°	60°	45°	30°	30°	15°
	45°	45°	30°	15°	15°	--



CARBUDES 2300 ®

Sintered silicon carbide. Hardness up to 2300 Vickers, resistance to chemical attack, and extremely high resistance to friction wear are among its most notable properties.

TECHNICAL DATA

HARDNESS (medium)	DENSITY gr/cm³	THERMAL CONDUCTIVITY	THERMAL EXPANSION	OPERATING TEMPERATURE
2300 Vickers	3,15	115 W/m.K (20 a 600°C)	4.2x10⁻⁶K⁻¹ (20 a 600°C)	1400°C máximoáx:)

TUBES

INTERNAL DIAMETERS	From 40 mm to 250 mm Large-diameter pipes with ceramic tile lining

AVIABLE CARBUDES ELBOWS

Radius	500	750	1000	1500	2000	2500	3000
Angles	90°	90°	90°	60°	45°	45°	30°
	60°	60°	60°	45°	30°	30°	15°
	45°	45°	45°	30°	15°	15°	--



LINING & PLATES

ALUDES 1500®

BASALDES 800®

ZIRDES 2000®

CARBUDES 2300®

DURCOP 1300®

ZIRALDES 1250/1310®

INOXDES 330/420/550/660®

CROMDES 700/800/850®

TUNGDES 2300®

POLIDES 86/88/92®

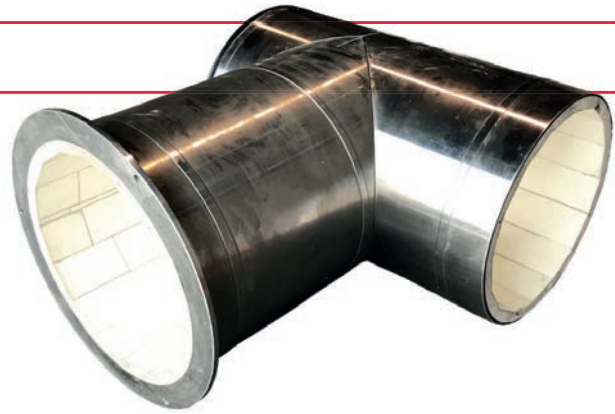
HARDES 400/450/500®

ALUPLAST 930 R/M®

PLASTDES 100®

ALUDES 1500®

92% SINTERED ALUMINA



Product with high resistance to abrasion, it can be used for: Grinding balls, tiles with thicknesses from 1.5 mm upwards. Shaped parts and pipes. Sintered alumina is a versatile, long-lasting product, which can be applied with adhesives or welding, depending on the working conditions.

TECHNICAL DATA

Composition	Density gr/cm³	Hardness average	Thermal conductivity	Thermal expansion	Working temperature
AI2 O3 92%	3.65	1500 Vickers	21 W/m.K	8.2x10'8K1 20 a 600°C	1000°C maximum

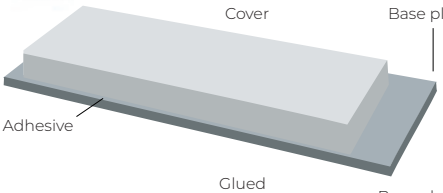


Square tiles supplied on paper or rubber backing

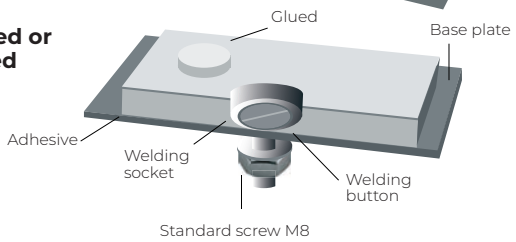
Pannels 500x500mm
Square tiles 20x20 mm

Thickness	Standard plain tales / size mm ■ Available with hole			
6 mm	100x25	150x50	100x100	150x100
13 mm	100x25	150x50	100x100	150x100
25 mm		150x50	100x100	150x100
50 mm			100x100	150x100

Glued



Soldered or screwed



BASALDES 800®

FUSED CAST BASALT



Created from selected natural basalt melted at 1300°C which is subsequently recrystallised, giving it high resistance to abrasion, chemical attack and improved sliding.

TECHNICAL DATA

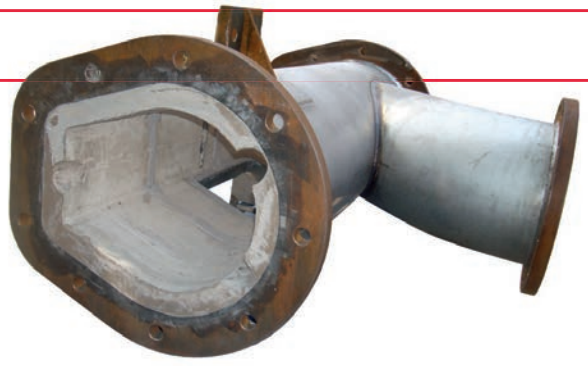
Hardness (average)	Density gr/cm³	Abrasion resistance	Thermal conductivity	Thermal expansion	Working Themperature
720-800 Vickers	2,90	3-4 cm^3 / 50 cm^2 (máx.) (DIN 52108)	1,1-1,7 W/m.K	9 x 10^{-6} K^{-1} 2-400 °C	400 °C (máx:600°C without sudden changes)

ANALYSIS (average)

Al_2O_2	Zr O_2	SI O_2	Fe_2O_2 y Fe O	Ca O	Mg O	K_2O	Na_2O	TI O_2
Ca O	--	43-55%	9-14%	10-12%	8-12%	3-5%	3-5%	2-3%

ZIRDES 2000®

FUSED ALUMINA



ZIRDES is a product obtained from a triphasic system composed of corundum in a vitreous phase. The final product exhibits excellent properties, particularly high hardness, resistance to elevated temperatures and chemical corrosion.

TECHNICAL DATA

Hardness (average)	Density gr/cm³	Abrasion resistance	Thermal conductivity	Thermal expansion	Working Themperature
2000 Vickers	3,5	0,75-1 cm^3 / 50 cm^2 (máx.) (DIN 52108)	4,4W/m.K	8 x 10^{-6} K^{-1} 0-400 °C	Normal: 1400 °C (máx:)

Standard TILES	
DIMENSIONS (mm)	THICKNESS (mm)
200 x 100 200 x 200 250 x 250 300 x 300	22, 30, 40, y 50

TILES with holes	
DIMENSIONS (mm)	THICKNESS (mm)
200 x 100 200 x 200 250 x 250	30

Hexagonal TILES	
	ø 200 inscribed Thickness 30 mm

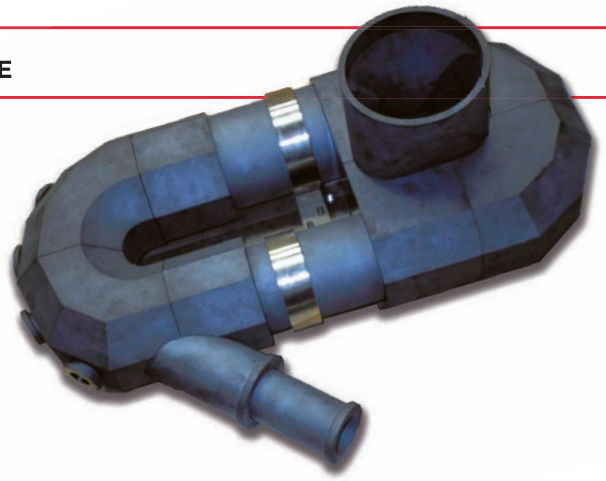
ANALYSIS (average)

Al_2O_2	Zr O_2	SI O_2
50%	32%	16%

On request: Radial Tiles and Industrial Floor Tiles with different patterns with anti-slip surface.

CARBUDES 2300®

SINTERED SILICON CARBIDE



A new generation of ceramics featuring hardness of up to 2300 Vickers, excellent chemical attack resistance and outstanding resistance to frictional wear among their key properties.

TECHNICAL DATA

Hardness (average)	Density gr/cm³	Thermal conductivity	Thermal expansion	Working temperature
2300 Vickers	3,15	115 W/m.K (20 a 600°C)	4.2x10^{-6}K^{-1} (20 a 600°C)	1400°C máximo

SUPPLY OPTIONS

Custom-made parts, pipes, impellers, ducts, mechanical seals, diffusers, hydrocyclones, etc.

CHEMICAL RESISTANCE

+ No corrosion *(+) Possible corrosion* *o Corrosion appears*

Hydrochloric Acid HCl (conc.36%)		Zinc chloride ZCl (conc.60%)		Nitric Acid HNO_3 (conc.65%)		Ammonium Nitrate HCl (conc.50%)		Sulphuric Acid H_2SO_4 (conc.50%)		Sulphuric Acid H_2SO_4 (conc.98%) HCl sulphuric (conc. 36%)		Phosphoric Acid H_3PO_4 (conc.85%)		Hydrofluoric Acid HF (conc.40%)		Sodium hydroxide NaOH (conc.30%)		Potassium hydroxide KOH (conc.20%)		Sodium chloride NaCl (cold saturated solution) Cl(conc.36%)		Potassium Chloride KCl (cold saturated solution)	
CARBUDES		CARBUDES		CARBUDES		CARBUDES		CARBUDES		CARBUDES		CARBUDES		CARBUDES		CARBUDES		CARBUDES		CARBUDES		CARBUDES	
20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
+	+	+	+	+	+	+	+	+	+	+	+	+	+	(+)	+	+	+	(+)	+	+	+	+	+

DURCOP 1300®

TUNGSTEN CARBIDE



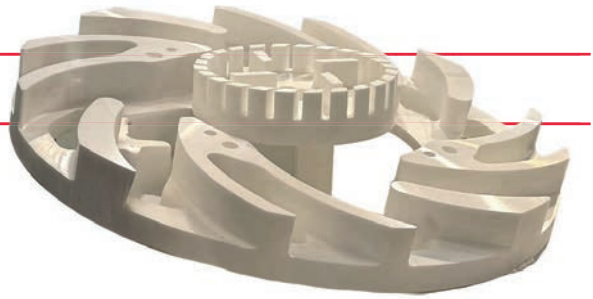
A highly abrasion- and impact-resistant product, available in the following forms: grinding balls, tiles from 2 mm thickness onwards, shaped components and piping. Tungsten carbide is a versatile, long-lasting material that can be applied eitherusing adhesives or by welding, depending on the working conditions.

TECHNICAL DATA

Composition	Density gr/c m³	Hardness (average)	Flexural strength	Working temperature
Wc balance Co 13% TaNbC 1%	14.40	1300 Vickers	3000 MPa	600°C máx.

ZIRALDES 1250/1310®

HIGH-DENSITY TEC. CERAMIC



Ceramic developed to protect surfaces against wear caused by abrasion and impact across a range of industries, such as mining, energy and transport. It combines mechanical strength, durability and ease of application, ensuring a long service life under extreme conditions.

TECHNICAL DATA

Product	Hardness (average)	Density gr/cm³	Fracture resistance	Compressive strength	Flexural strength	Working temperature	Chemical resistance
Z 1250®	1250 Vickers	5,65	12,5	850 MPa	290 MPa	1000 °C (máx:)	High, against strong acids and alkalis
Z 1310®	1310 Vickers	6	6	5000 MPa	1100 MPa	1550~2600°C	

ZIRALDES 1250® is used in mining, the energy industry and transport to protect and line industrial equipment such as hoppers, chutes, ducts and cyclones, reinforce loading and unloading systems, optimise the conveying of solid materials in production lines and ensure resistance to abrasion and impact. **ZIRALDES 1310®** is mainly used in high-power devices, tubes, thermal insulation, high-temperature processes and other applications requiring both thermal conductivity and thermal insulation simultaneously.



INOXDES 330/420/550/660®

WEAR RESISTANT STEEL PLATES
BI-METALLIC WEAR RESISTANT STAINLESS STEEL

In cases of wear from moisture and high slipperiness, wear-resistant stainless steel is the ultimate alternative. The hardness of "INOXDES 424® is almost 3 times higher than that of conventional stainless steel, and the hardness of "INOXDES 660® is 10 times higher.



TECHNICAL DATA FOR WEAR RESISTANT STEEL PLATES

Product	Hardness (≤)	Chemical Analysis (≤)
INOXDES 330/420®	330-420 Vickers	Carbide 25-15 %

TECHNICAL DATA FOR BI-METALLIC WEAR RESISTANT STAINLESS STEEL

Product	Hardness average	Chemical Analysis	TEMPERATURE
INOXDES 550/660®	520-660 Vickers	Carbide 28-35 %	500-800 °C

Possible Base Sheets in Stainless Steel Inox-304 and Inox-316

CROMDES 700/800/850®
TUNGDES 2300®



BIMETALIC SHEET

Bimetallic steel with high resistance to abrasion and impact, suitable for operating temperatures up to 800°C.

TECHNICAL DATA

HARDNESS (average)	ANALYSIS	WORKING THEMPERATURE
de 700 a 950 Vickers	C-Cr-Mo-Nb-V-W-B	de 500 a 800°C

Chapa Base	DEPOSICIÓN	medidas (mm)
de 2 a 25mm	de 2 a 20mm	2950x1400 2950x2100

CROMDES 700P®
TUNGDES 900P®



POLISHED BIMETALIC SHEET

Bimetallic steel with high resistance to abrasion and impact, featuring excellent sliding properties and suitable for operating temperatures up to 500°C.

TECHNICAL DATA

MATRIX HARDNESS	ANALYSIS	CARBIDE HARDNESS
675 -900 HV	C-Cr-Mn-Mo-Ti-Nb-V C-Cr-Mn-Mo-W	1400-2500 HV

Standard format	Thicknesses (Substrate + Coating)
3000x1000 mm 3500mmX1350 mm	5+5 mm,6+6 mm, 10+10 mm, 12+12 mm y 20+20mm

POLIDES 86/88/92®

POLYURETHANE PLATES

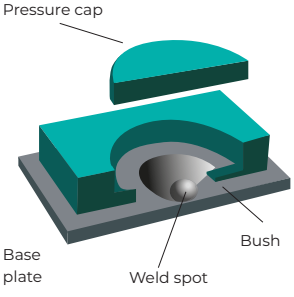
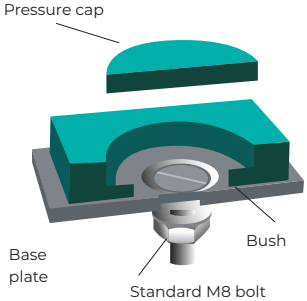
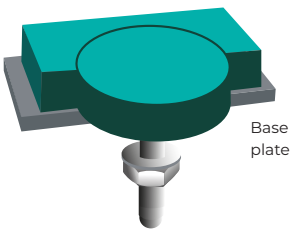


Product with properties of high resistance to abrasion and impact and excellent slipperiness.

TECHNICAL DATA

Hardness	Density	ABRASION DIN 53516	FRICTION COEFICIENT	COLOURS	thickness mm	Size mm
86 shore A	1,20 gr/cm³	18 mm³	0,25 in dry	Red	2, 3, 4, 5, 6, 8,	3000x500
88 shore A	1,20 gr/cm³	22 mm³	0,25 in dry	Green	10 , 12, 15,20,	2000x1000
92 shore A	1,20 gr/cm³	31 mm³	0,19 in dry	Orange	25, 30	3000x1200

TYPES

SUJECIÓN SOLDADURA	SUJECIÓN TORNILLO ROSCADO	SUJECIÓN TORNILLO ROSCADO
		

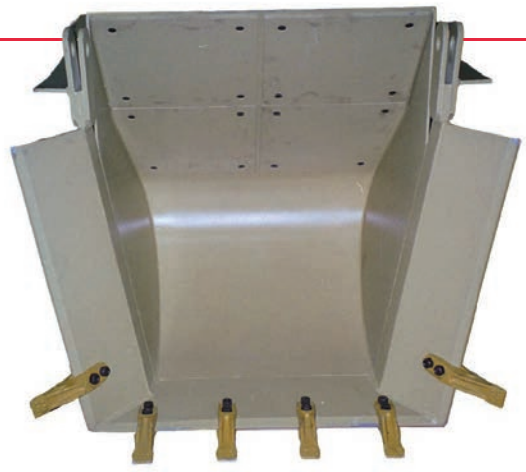
ANTI-CLUMPING
Prevents material adhesion issues

NOISE REDUCTION
Reduces noise

SELF-EXTINGUISHING
Supplly of flame-retardant material on request

HARDES 400/450/500®

WEAR RESISTANT STEEL PLATES



Steel with anti-wear alloy and thermo-mechanical hardness in the core, withstands temperatures up to 400°C and processing up to 900°C. Can be used in crushers, blades, mixers, vibratory feeders...

TECHNICAL DATA

Hardness (average	ANALYSIS	TEMPERATURA TRABAJO
from 400 to 500 Vickers	C-Mn-Cr-Mo-Ni	450°C

Chapa	dimensions (mm)
from 3 to 150mm	3000x1500 6000x1500 6000x2000 8000x2500



ALUPLAST 930 R/M®

SINTERED ALUMINA 92% ADHESIVE PASTE

Adhesive paste containing 70% ALUDES 150 particles. The best alternative for non-standard forms of equipment lining or those which require repair.

MIX



Adhesive paste | Hardening agent | 8h after application

USAGE

ALUPLAST 930R	A+B 10 kg	Sufficient thickness	5 mm 1 m² aprox
ALUPLAST 930R	A+B 250 kg	Sufficient thickness	15 mm 1 m² aprox

PLASTDES 100®

POLÍMERO DE ALTA DENSIDAD MOLECULAR



Producto con propiedades de alta resistencia a la abrasión, impacto y excelente deslizamiento.

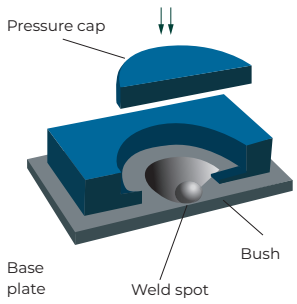
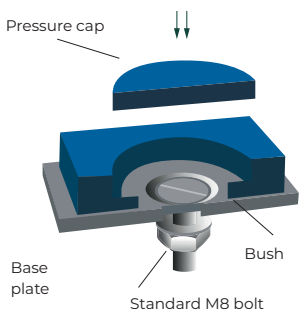
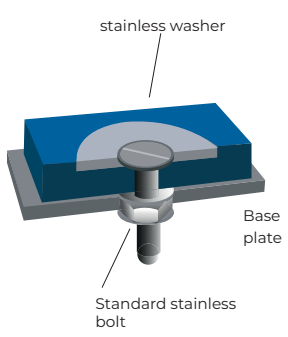
TECHNICAL DATA

Hardness	Density gr/cm³	COEFFICIENT of FRICTION
100 shore A	1,20	0,08-0,10 en seco

SUPPLY OF PLATES

Thickness (mm)	Size (mm)
6,8,10,12,15,20,25	3000x1200

TYPES

SUJECIÓN SOLDADURA	SUJECIÓN TORNILLO ROSCADO	SUJECIÓN TORNILLO ROSCADO
		

AANTI-CLUMPING
Prevents material adhesion issues

NOISE REDUCTION
Reduces noise

SELF-EXTINGUISHING
Suppply of flame-retardant material on request



Tecnodesgast has been helping its clients operate sustainably for over 40 years.

With wear protection solutions, we prevent our customers' production from experiencing premature downtime. Lining and protecting plants and pipelines allow them to be reused instead of producing them anew. This saves significant CO2 emissions and protects the environment.

FORM OF WORKING CONDITIONS

We provide advice with no obligations

Sender

Mr/Mrs _____ Department _____

Company _____ Activity _____

Address _____ City _____

Telephone _____ Fax _____

E-Mail _____ Website _____

Description of equipment

Part drawing

Product that wears

Product working_____ Product flow_____ Tm/h

Wear caused by ☐ Abrasion ☐ Bridge Formation ☐ Others_____

☐ Corrosion ☐ Impact

Material jumming ☐ Clumping ☐ Yes ☐ No ☐ Adhesions ☐ Freezing adhesions

Abrasion Impact

Accidental fall of foreign object_____ Hopper is filled empty ☐ Yes ☐ No ☐ Sometimes

Density_____ g/m³ Velocity _____m/s Impact distance_____m

Edges ☐ Yes ☐ No Moisture corrosion ☐ Yes ☐ No Particle size: max_____mm min. _____mm

Angle of incidence ☐ 15° ☐ 30° ☐ 45° ☐ 60° ☐ 90°

Heat

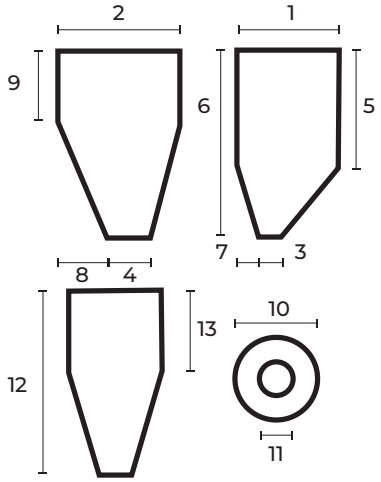
Working temperature max._____°C min. _____°C Static Load ☐ Yes ☐ No

Installation Load ☐ Continuous ☐ Discontinuous Thermal Shocks ☐ Yes ☐ No

Chemical

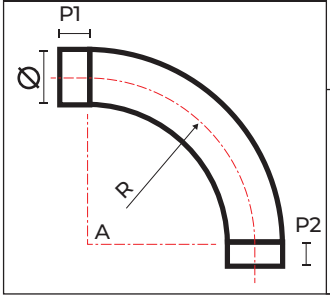
Chemical (products): _____%_____; _____%_____

SILO or HOPPER dimensions



1 = _____
2 = _____
3 = _____
4 = _____
5 = _____
6 = _____
7 = _____
8 = _____
9 = _____
10 = _____
11 = _____
12 = _____
13 = _____

PIPE dimensions



Ø (interior) = _____
Lengh = _____

Ø (interior) = _____
R Radius = _____
Angle = _____
P1- Extension = _____
P2- Extension = _____

FINANCES

Current duration

Product _____ Hardness_____

Days _____ Weeks _____ Months_ _____

Desired duration_____

TECNODESGAST®

Tecnología del desgaste

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