

Depuis 1933

French manufacturer,
Designer of cutting tools

### SLITTING SAWS & CIRCULAR KNIVES FOR INDUSTRIAL CUTTING

Since 1933, Caleyron Industries has been designing highprecision cutting solutions for the most demanding industries.

SHARPENING OF CIRCULAR SAW BLADES

COATINGS AND SURFACE TREATMENTS

SOLID CARBIDE CIRCULAR SAW
BLADES

**CIRCULAR SAW BLADES HSS/HSS-E** 

**CUT-OFF CIRCULAR SAW BLADES** 

CARBIDE-TIPPED CIRCULAR SAW BLADES

SPECIAL CIRCULAR SAW BLADES

**CIRCULAR KNIVES** 



Caleyron Industries manufactures a wide range of carbide circular saw blades, similar to DIN standards, from  $\emptyset$  20 to  $\emptyset$  300 mm and thicknesses from 0.2 to 6 mm.

M

A - Fine-toothed

AAA

AW - Alternating beveled teeth

One tooth beveled to the left, one tooth beveled to the right

 $\mathcal{M}$ 

B - Coarse-toothed

AM

BW - Alternating beveled teeth

One tooth beveled to the left, one tooth beveled to the right



C - Alternating beveled teeth

One tooth beveled to the left, one tooth beveled to the right

Depending on your requirements, we can produce teeth with customised

dimensions standard)

(non-

Thickness		0.2	0.25	0.3	0.4	0.5	0.6	0.8		1.2	1.6	2	2.5	3	4	5	6
Diam.	Bore								Number of	teeth					DII	N 183	57
15	5	64	64	64	64	48	48	40	40	40	40	40	40	40	24	24	24
20	5	80	64	64	64	48	48	48	40	40	40	32	32	32	24	24	24
25	8	80	80	80	64	64	64	48	48	48	40	40	40	32	32	32	24
30	8	100	100	80	80	80	64	64	64	48	48	48	40	40	40	32	32
40	10	128	128	100	100	80	80	80	64	64	64	48	48	48	40	40	40
50	13	128	128	128	100	100	100	80	80	80	64	64	64	48	48	48	40
63	16		160	128	128	128	100	100	100	80	80	80	64	64	64	48	48
80	22			160	160	128	128	128	100	100	100	80	80	80	64	64	64
100	22					160	160	128	128	128	100	100	100	80	80	80	64
125	22							160	160	128	128	128	100	100	100	80	80
150	32								150	150	150	128	128	128	128		
160	32								160	160	160	128	128	128	128		
200	32										160	160	160	128	128		

Thickness		0.2	0.25	0.3	0.4	0.5	0.6	0.8	1	1.2	1.6	2	2.5	3	4	5	6
Diam.	Bore							N	umber of t	eeth					D	IN 18	38
15	5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
20	5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
25	8	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
30	8	30	30	30	30	30	30	24	24	24	24	24	24	24	24	24	24
40	10	40	40	40	40	40	40	32	32	32	32	24	24	24	20	20	20
50	13				48	48	48	40	40	40	32	32	32	24	24	24	20
63	16				64	64	64	48	48	40	40	40	32	32	32	24	24
80	22					64	64	64	48	48	48	40	40	40	32	32	32
100	22					80	80	64	64	64	48	48	48	40	40	40	32
125	22						80	80	80	64	64	64	48	48	48	40	40
150	32								80	80	80	64	64	64	64		
160	32								80	80	80	64	64	64	64		
200	32										80	80	80	64	64		



Caleyron Industries manufactures a wide range of high speed steel circular saw blades according to DIN standard, from  $\emptyset$  20 to  $\emptyset$  600 mm with thicknesses ranging from 0.2 to 6 mm, for cold cutting technology.

A - Fine-toothed

111

AW - Alternating beveled teeth

One tooth beveled to the left, one tooth beveled to the right



B - Coarse-toothed



BW - Alternating beveled teeth

One tooth beveled to the left, one tooth beveled to the right



C - Alternating beveled teeth

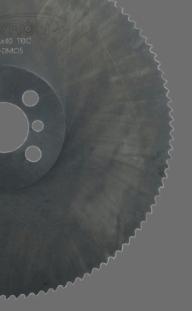
One tooth beveled to the left, one tooth beveled to the right

Made of high-speed steel M2 or enriched with 5% cobalt (M35) for excellent heat resistance and superior durability. They are ideal for difficult-to-machine materials such as:

Stainless steel (INOX),Inconel, hard steels.

Diam.	Bore								Number	of teeth					I	I NIC	837
20	5	80	64	64	64	48	48	48	40	40	40	32	32	32	24	24	24
25	8	80	80	80	64	64	64	48	48	48	40	40	40	32	32	32	24
32	8	100	100	80	80	80	64	64	64	48	48	48	40	40	40	32	32
40	10	128	128	100	100	80	80	80	64	64	64	48	48	48	40	40	40
50	13	128	128	128	100	100	100	80	80	80	64	64	64	48	48	48	40
63	16		160	128	128	128	100	100	100	80	80	80	64	64	64	48	48
80	22			160	128	128	128	128	100	100	100	80	80	80	64	64	64
100	22					160	160	128	128	128	100	100	100	80	80	80	64
125	22						160	160	160	128	128	128	100	100	100	80	80
150	32								160	160	160	128	128	128	128	100	100
160	32								160	160	160	128	128	128	128	100	100
200	32								200	200	160	160	160	128	128	128	100
250	32										200	200	160	160	160	128	128
315	32												200	200	160	160	160

	Thickness		0.2	0.25	0.3	0.4	0.5	0.6	0.8		1.2	1.6	2	2.5	3	4	5	6
	Diam.	Bore								Number	of teeth					D	IN 18	338
	20	5					24	24	24	20	20	20						
	25	8					32	32	24	24	24	20	20	20				
	32	8					30	30	20	20	20	20	20	20	20	20	20	20
	40	10					40	40	40	32	32	32	24	24	24	20	20	20
	50	13					48	48	40	40	40	32	32	32	24	24	24	20
3	63	16					64	48	48	48	40	40	40	32	32	32	24	24
	80	22					64	64	64	48	48	48	40	40	32	32	32	32
	100	22					80	80	64	64	64	48	48	48	40	40	40	32
	125	22						80	80	80	64	64	64	48	48	48	40	40
	150	32								80	80	80	64	64	64	64	48	48
	160	32								80	80	80	64	64	64	48	48	48
	200	32								100	100	80	160	80	64	64	64	48
	250	32										100	100	80	80	80	64	64
	315	32												100	100	80	80	80



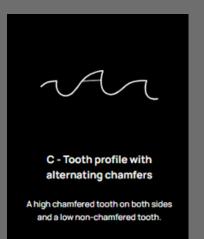
# CUT-OFF CIRCULAR SAW BLADES HSS & HSS-E

Caleyron Industries manufactures a wide range of cut-off circular saw blades, in HSS and HSS-E M35 from Ø 175 to Ø 700 mm.



BW - Tooth profile with alternating chamfers

A left chamfered tooth, a right chamfered tooth.



Ø	Thickness	Bore	HUB	Number and shape of the teeth									
				T3	Т4	T5	Т6	77	Т8	T10	T12	T14	T16
	1,2	32	75	180 BW	140 BW	100 C	90 C	80 C	70 C				
175	1,5	32	76	180 BW	140 BW	100 C	90 C		70 C				
	2	32	77	180 BW	140 BW	100 C		80 C	80 C				
200 -	1.8	32	90	200 BW	160 BW	120 C	100 C		80 C				
200	2	32	91	200 BW	160 BW	120 C	100 C		80 C				
	1,2	32	100	220 BW	180 BW	140 C	120 C		90 C				
	1,5/1,6	32	90	220 BW	180 BW	140 C	120 C		90 C				
	2	32	90	220 BW	180 BW	140 C	120 C		90 C				
	1	32	100	240 BW	200 BW	160 C	128 C	110 C	100 C	80 C			
	1.2	32	100	240 BW	200 BW	160 C	128 C	110 C		80 C			
250	1,5/1,6	32/40	100	240 BW	200 BW	160 C	128 C	110 C	100 C	80 C			
_	2	32/40	100	240 BW	200 BW	160 C	128 C		100 C	80 C			
	2.5	32/40	100	240 BW	200 BW	160 C	128 C	110 C	100 C	80 C			
_	1.2	32	100	280 BW	220 BW	180 C	140 C	120 C	110 C	90 C			
	1.6	32	100	280 BW	220 BW	180 C	140 C	120 C	110 C	90 C			
	2	32/40	100	280 BW	220 BW	180 C	140 C	120 C	110 C	90 C			
	2.5	32/40	100	280 BW	220 BW		140 C	120 C	110 C	90 C			
	3	32/40	100	280 BW	220 BW	180 C	140 C		110 C	90 C			
	1.6	32	100	300 BW	220 BW	180 C	160 C		120 C	90 C			
300 -	2	32/40	100	300 BW	220 BW	180 C	160 C		120 C	90 C			
-	2.5	32/40	100	300 BW	220 BW	180 C	160 C		120 C	90 C			
	3	32/40	100	300 BW	220 BW	180 C	160 C		120 C	90 C			
	1.6	32	100	320 BW	240 BW	200 C	160C		120 C	100 C	80 C		
315 -	2	32/40	100	320 BW	240 BW	200 C	160C		120 C	100 C	80 C		
313	2.5	32/40	100	320 BW	240 BW		160C		120 C	100 C	80 C		
	3	32/40	100	320 BW	240 BW	200 C	160C		120 C	100 C	80 C		

### CUT-OFF CIRCULAR SAW BLADES HSS & HSS-E

325	2.5	32/40	120	320 BW	250 BW	200 C	170 C		128 C	100 C			
323	3	32/40	120	320 BW	250 BW	200 C	170 C		128 C	100 C			
	1.8	32/40	120	350 BW	280 BW	220 C	180 C	160 C	140 C	110 C	90 C		
350	2	32/40	120	350 BW	280 BW	220 C	180 C	160 C	140 C	110 C	90 C		
330	2.5	32/40/50		350 BW	280 BW	220 C	180 C	160 C	140 C	110 C	90 C		
	3	32/40/50	120	350 BW	280 BW	220 C	180 C	160 C	140 C	110 C	90 C		
	2	32/40/50	120	380 BW	280 BW	220 C	190 C	160 C	140 C	110 C	100 C		
370	2.5	32/40/50	120	380 BW	280 BW	220 C	190 C	160 C	140 C	110 C	100 C		
	3	32/40/50		380 BW	280 BW	220 C	190 C	160 C		110 C	100 C		
	2	32/40/50	120		310 BW	250 C	200 C		160 C	120 C		100 C	
	2.5		120		310 BW	250 C	200 C		160 C	120 C		100 C	
400	3	32/40/50	120		310 BW	250 C	200 C		160 C	120 C		100 C	
	3.5	40/50	120		310 BW	250 C	200 C		160 C	120 C		100 C	
	4	40/50	120		310 BW	250 C	200 C		160 C	120 C		100 C	
	2.5	40/50	120		320 BW	260 C	220 C		160 C	130 C		100 C	
425	3	40/50	120		320 BW	260 C	220 C		160 C	130 C		100 C	
425	3.5	40/50	120		320 BW	260 C	220 C		160 C	130 C		100 C	
	4	40/50	120		320 BW	260 C	220 C		160 C	130 C		100 C	
	2.5	40/50	130		350 BW350 BW	280 C	230 C		180 C	140 C	120 C		90 C
450	3	40/50	130		350 BW	280 C	230 C		180 180 CC	140 C	120 C		90 C
450	3.5	40/50	130		350 BW	280 C	2230 C30 C		180 C	140 C	120 C		90 C
	4	40/50	130		350 BW	280 C	230 C		180 C	140 C	120 C		90 C
	3	40/50	130		390 BW	310 C	260 C		200 C	160 C			
500	3.5	40/50	130		390 BW	310 C	260 C		200 C	160 C			
	4	40/50	130		390 BW	310 C	260 C		200 C	160 C			
525	3.5	50	140		410 BW	330 C	270 C		210 C	164 C			
525	4	50	140		410 BW	330 C	270 C		210 C	164 C			
550	3.5	50/90/1/0								170.0	140 C	120 C	
330			200/225				280 C		220 C				
	4	50/90/140					280 C 280 C		220 C 220 C		140 C	120 C	
570	3.5	50/90/140				340 C	280 C		220 C		140 C	120 C	
570	4	50/90/140	200/225			340 C	280 C		220 C	170 C	140 C	120 C	
	3.5 4 3.5	50/90/140 50 50 50 50/90/140	200/225			340 C	280 C 300 C 300 C		220 C	170 C 180 C	140 C		
	3.5	50/90/140 50 50 50 50/90/140	200/225 180 180 200/225 200/225			340 C 360 C 380 C	280 C 300 C 300 C 320 C		220 C 220 C 220 C 240 C 240 C	170 C 180 C 190 C 190 C	160 C	130 C	
	3.5 4 3.5 4	50/90/140 50 50 50/90/140 50/90/140	200/225 180 180 200/225 200/225			340 C 360 C 380 C	280 C 300 C 300 C 320 C 320 C		220 C 220 C 220 C 220 C 240 C	170 C 180 C 190 C 190 C	160 C	130 C	
600 -	3.5 4 3.5 4	50/90/140 50 50 50 50/90/140 50/90/140	200/225 180 180 200/225 200/225			340 C 360 C 380 C 380 C 390 C	280 C 300 C 300 C 320 C 320 C	280 C	220 C 220 C 220 C 240 C 240 C 240 C 240 C	170 C 180 C 190 C 190 C 190 C 190 C	160 C 160 C 160 C	130 C 130 C 140 C	

Cut-off saw blades are commonly used in industries where cutting precision and speed are critical.

#### **Machinery and Equipment Manufacturing:**

Cutting various metals (steel, aluminum, copper), metal profiles, tubes, bars...

They are also essential in production lines where metals and hard materials are processed into specific parts or components.

- Non-ferrous metals such as copper, brass, and aluminum
- Steel and Stainless Steel: Designed for cutting hard steels

Our cut-off blades can be customized in terms of diameter, thickness, and coating to perfectly match the requirements of each application.

#### TCT & CFRMFT



Caleyron Industries offers a complete range of TCT saw blades in carbide and cermet, suitable for all applications, with diameters ranging from 250 to 700 mm.

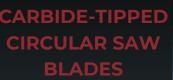


Blade Type	Materials Machined	Machines	Industries
тст	Cutting medium to high carbon steel or stainless steel, in solid bars or thick-walled tubes	Amada, Tsune, Noritake, Nishijima, Kasto, Behringer-	Mysessytians sytemehile
Cermet	Cutting low to medium carbon steel, in solid bars or thick-	Eisele, Bewo, Exact-cut, Kaltenback, Sinico, Everising, Rattunde	Aéronautique, automobile, mécanique, nucléaire, etc.

#### **TCT and Cermet circular saw blades for ferrous metals**

walled tubes

DIAMETER	THICKNESS	BORE	NUMBER OF TEETH	PINHOLES
mm				
250	2,0/1,75	32	54/60	4/9/1950
250	2,0/1,75	32	72 / 80	4/9/1950
250	2,0/1,75	40	54/60	4/11/1963
250	2,0/1,75	40	72 / 80	4/11/1963
285	2,0/1,75	32	54/60	4/9/1950
285	2,0/1,75	32	72 / 80	4/9/1950
285	2,0/1,75	40	54/60	4/11/1963
285	2,0/1,75	40	72 / 80	4/11/1963
315	2,3/2,0	32	54/60	4/9/1950
315	2,3/2,0	32	72 / 80	4/9/1950
315	2,3/2,0	40	54/60	4/9/1950
315	2,3/2,0	40	72 / 80	4/9/1950
360	2,6/2,25	40	60 / 72	4/11/1990
360	2,6/2,25	40	80 / 100	4/11/1990
360	2,6/2,25	50	60 / 72	4/16/80
360	2,6/2,25	50	80 / 100	4/16/80
425	2,6/2,25	40	60 / 72	4/11/1990
425	2,6/2,25	40	80 / 100	4/11/1990
425	2,6/2,25	50	60 / 72	4/16/80
425	2,6/2,25	50	80 / 100	4/16/80
460	2,6/2,25	40	40 / 50	4/11/1990
460	2,6/2,25	40	60 / 72	4/11/1990
460	2,6/2,25	50	40 / 50	4/16/80
460	2,6/2,25	50	60 / 72	4/16/80







Blade Type	Matériaux usinés	Machines	Industries
Carbide-tipped circular saw blades	Light alloys, aluminum, zinc, copper, brass, bronze, cutting of tubes, window profiles, and solid materials		
Dry-cut blades (for dry steel cutting)	Steel, light alloys, plastics, PVC, Plexiglass, composite materials, fiberboard, insulating materials, multiplex panels, solid wood, laminated wood, particle boards, wood layers, wood with nails or	Bosch, Makita, Jepson, Hitachi	Construction, Automotive, Manufacturing, Aerospace, Woodworking, Metalworking

#### Carbide-tipped circular saw blades for non-ferrous metals

metal clips, etc.

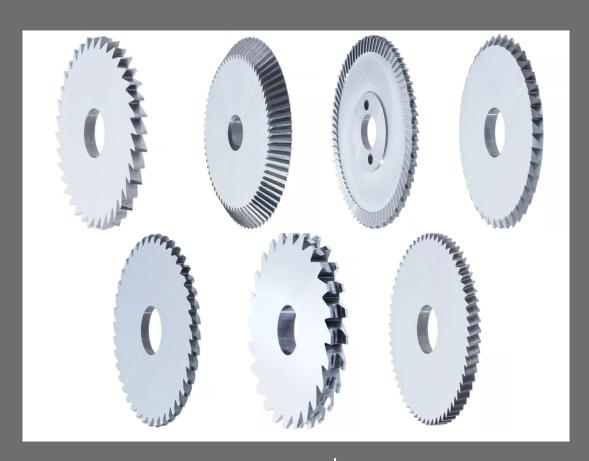
Positive cutting angle				
DIAMETER	THICKNESS	BORE	NUMBER OF TEETH	PINHOLES
mm				
250	3,2/2,6	30 / 40	60	2/9/55 + 4/12/64
300	3,2/2,6	30 / 40	96	2/9/55 + 4/12/64
350	3,2/2,6	30 / 40	84	2/9/55 + 4/12/64
400	3,8/3,2	30 / 40	96	4/12/64 + 2/12/80
400	3,8/3,2	40 / 50	96	4/12/64 + 2/12/80
450	4,4/3,8	30 / 40	96	4/12/64 + 2/12/80
450	4,4/3,8	30 / 40	108	4/12/64 + 2/12/80
500	4,2/3,8	30 / 40	120	4/12/64 + 2/12/80
Negative cutting angle				
250	3,2/2,6	30 / 40	60	2/9/55 + 4/12/64
300	3,2/2,6	30 / 40	72	2/9/55 + 4/12/64
300	3,2/2,6	30 / 40	96	2/9/55 + 4/12/64
350	3,2/2,6	30 / 40	84	2/9/55 + 4/12/64
350	3,2/2,6	30 / 40	108	2/9/55 + 4/12/64
400	3,8/3,2	30 / 40 / 50	96	4/12/64 + 2/12/80
450	4,4/3,8	30 / 40	108	4/12/64 + 2/12/80
500	4,4/3,8	30 / 40	120	4/12/64 + 2/12/80

Carbide, extremely hard and wear-resistant material, gives the blades exceptional hardness and rigidity, even at high temperatures, making it ideal for cutting high-alloy steels.

Cermet, hybrid material composed of ceramics, silicon carbide, and high-performance metals (such as chromium, cobalt, titanium, etc.), stands out for its extreme hardness and resistance to high temperatures. It provides a flawless finish, long service life, and optimal efficiency for intensive machining operations.

### SPECIAL CIRCULAR SAW BLADES





TYPE OF C	DECLAI	CIDCIII	AD CAL	AIC
TYPE OF S	PECIAL	CIRCUI		W S

#### **SPECIFICATIONS**

Alterna	ata ta	ath h	N I B I

Conical (30°, 45°, 60°)

Triple chip grind (TCG)

Isosceles tooth profile

Half-round convex

Half-round concave

Helical tooth profile

Surfacing, contouring, grooving, deburring

Chamfering, turning, countersinking

Fine cutting and precision machining

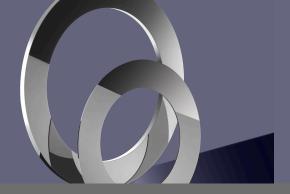
Chamfering, V-grooving, finishing angular surfaces, weld preparation

Rounding, surface finishing, deburring, molding

Rounding, surface finishing, deburring, molding

Grooving



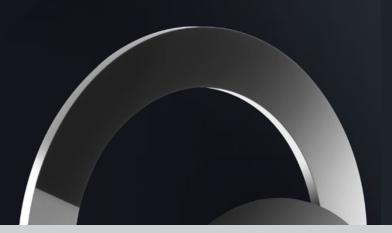


Caleyron Industries manufacture a wide range of circular knives in HSS M2, HSS-E M35, and solid carbide

The circular knives are made with a single bevel (1) or a double bevel (2), and in some cases with a pre-bevel (3-4).

	Form	Machined Materials	Material
Α	Simple bevel	Foam	
		Leather	
		Food-grade	
	Double bevel	Cardboard and plastic tubes	
A		Corrugated cardboard	
		Glass	
		Pneumatic tubes	HSS M2
	Simple bevel with pre-bevel	Aluminium foil	HSS-E M 35
A		Adhesive rolls	CARBURE
		Paper tissues	
		Bandages	
	Double bevel with pre-bevel	Cardboard tubes	
A		Toilet paper	
		Rubber profiles	
		Polypropylene film	

#### **SHARPENING OF CIRCULAR SAW BLADES AND CIRCULAR KNIVES**



#### What types of blades can we sharpen?

- HSS/HSS-E circular saw blades.
- Solid carbide circular saw blades
- Cut-off circular saw blades
- Half-round convex/concave
- circualr saw blades
- Isosceles tooth profile circular saw blades
- Carbide-tipped circular saw blades Alternate tooth bevel (ATB) circular saw blades
- Radius circular saw blades
- Conical circular saw blades
- Circular knives



#### **Thorough Inspection**

Our team performs a meticulous inspection of circular saw blades and circular knives. This evaluation aims to detect any irregularities, roughness, or deformation, sharpening process.

#### **Wear Correction**

highly precise sharpening machine. This step is crucial to restore the geometry and sharpness of the blades.

#### **Tooth Restoration**

The restoration of the teeth on circular saw blades and circular knives is carried out with extreme precision. This undergoes rigorous quality checks to maintain high standards.



Sharpening your saw blades and circular knives regularly is essential to maintain their optimal performance and extend their lifespan.

- 1. Loss of cutting efficiency;
- 2. Poor surface finish on the machined part;
- 3. Your tools cause burns on the material you're cutting or generate chips;
- 4. Regular use of your saw blades and circular knives.

# CUTTING TOOLS COATINGS AND SURFACE TREATMENTS



#### Performance, durability and quality: the coating makes the difference

#### **Quality improvement**

- Improved surface quality
- Compliance with dimensional tolerances
- Reduced production scrap

#### Increased tool life

Reduced tool changes, machine downtime and tool inventories.

#### **Productivity improvement**

- Optimized cutting conditions
- Possibility of high-speed machining
- Dry machining for certain applications
- Reduced heat build-up and material adhesion to the tool

Solution	Material	Coating	Advantages
GOLD	Steel	TiN	Versatile, wear-resistant, reduces abrasion and adhesive wear in various applications
PERFORM	Steel	AlCrN	Superior wear resistance and increased hardness     Enhanced performance with improved toughness     Better coating adhesion due to reduced internal compressive stresses     Reduced crater wear on HSS tools due to lower thermal conductivity     More resharpening cycles per tool
VOLCAN	Stainless Steel	TiAIN	<ul> <li>Suitable for tough conditions</li> <li>Highly resistant to crater wear and oxidation</li> <li>Ideal for both lubricated and dry machining</li> </ul>
COBRA	Titanium	AlTiSiN	<ul> <li>Revolutionary smooth coating, no post-treatment (polishing) required</li> <li>Exceptional wear and oxidation resistance</li> <li>Resists thermal stress</li> <li>Superior results in hard machining</li> <li>Maximum tool precision</li> </ul>
SUPRA	Cast Iron	AlCrN	Optimal layer adhesion High stability under thermal shocks Perfect for heavily stressed cutting edges
RAINBOW	Copper / Brass / Bronze / Silica-charged Aluminum (6 to 12%)	ta-C	Ultra-thin coating maintains sharp cutting edges Superior smoothness prevents material adhesion Extreme hardness for increased wear resistance





#### **SPIRIT OF QUALITY SINCE 1933**

For over 90 years, Caleyron Industries has been designing and manufacturing circular saw blades and circular knives to meet the needs of manufacturers in a wide variety of industries.

Thanks to close collaboration with our customers and a constant spirit of innovation, we have become a preferred partner for manufacturers worldwide.

Our strength lies in our ability to anticipate market needs and meet our customers' most demanding requirements, while maintaining a constant commitment to operational excellence.

Because your productivity depends on the precision and speed of your cutting operations, we work with you to design reliable, durable, tailor-made tools.



Made in France



#### **Custom design**

Tools tailored to your machining conditions and challenges



Quality certified ISO 9001



A family-owned business with over 90 years' experience



**50%** of our revenue is generated from international sales



A high-performance machinery park that meets your challenges and our standards