



ELBROC
MINING PRODUCTS

TH PROFILE SETS





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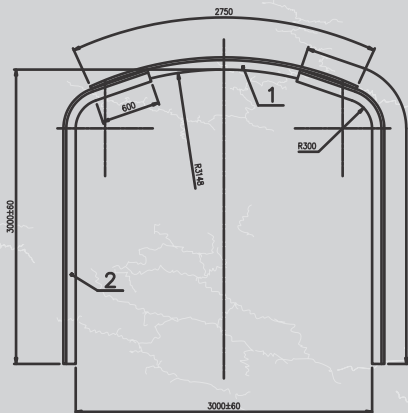
TH PROFILE SETS

RING SET



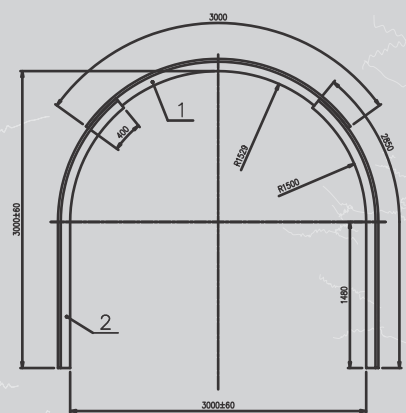
- In standard arch lengths from 1,8m up to 5,5m
- Suitable in high pressure tunnels

SEMI ARCH SET



- Used in rectangular and square excavations and offers maximum deflection resistance.

HALF ARCH SET



- Used in poor ground conditions and unsure pressures.

TH ARCH SET SUPPORT SYSTEMS

APPLICATIONS

- TUNNEL JUNCTIONS
- OVER AND UNDER ORE PASSES
- HAULAGES
- INCLINE SHAFT PORTALS
- YIELDING SUPPORT THROUGH BAD GROUND CONDITIONS, DYKES, FAULTS & FRIABLE GROUND
- SUITABLE FOR ALL ROCK OR SOIL TYPES

BENEFITS

- SIMPLE AND FAST INSTALLATION
- VERY HIGH LOAD CARRYING CAPACITY
- LONG OPERATIONAL LIFE
- COST EFFECTIVE
- DIMENSIONAL AND DESIGN FLEXIBILITY





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Chemical Composition

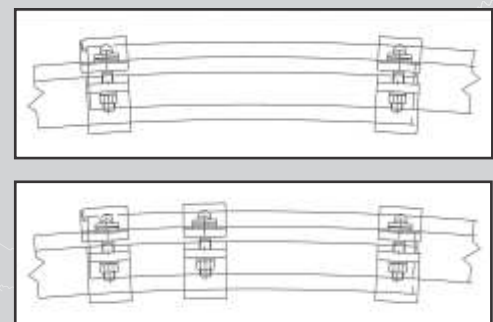
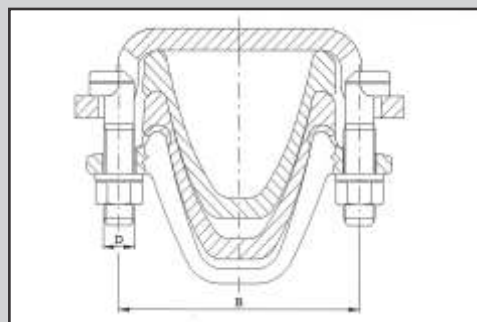
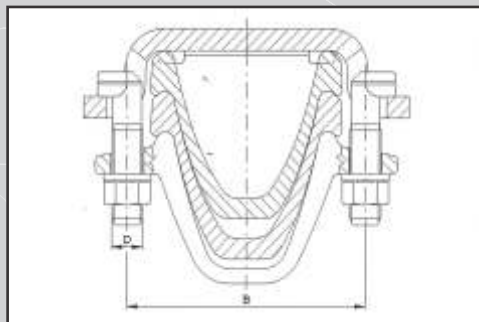
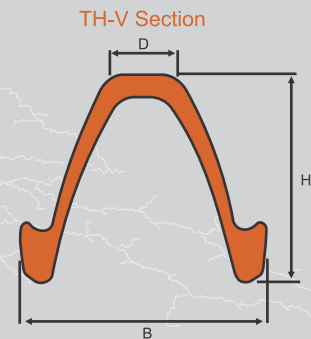
Steel Mark	DIN Standard	C %	Mn %	Si %	S max. %	P max. %	Al celk. %	N max.
31 Mn 4	21530	0.32 - 0.36	0.80 - 1.10	0.20 - 0.50	0.035	0.035	0.020 min.	

Mechanical Properties

Designation	Standard or/and customer specification	Yield Strength Re min	Tensile Strength Rm min	Elongation	Sections made of the relevant steel
		N/mm ²	N/mm ²	%	
31 Mn 4	DIN 21530	≥ 350	≥ 550	18	TH16,5; TH21; TH29; TH34; TH36; TH40; TH42; TH44

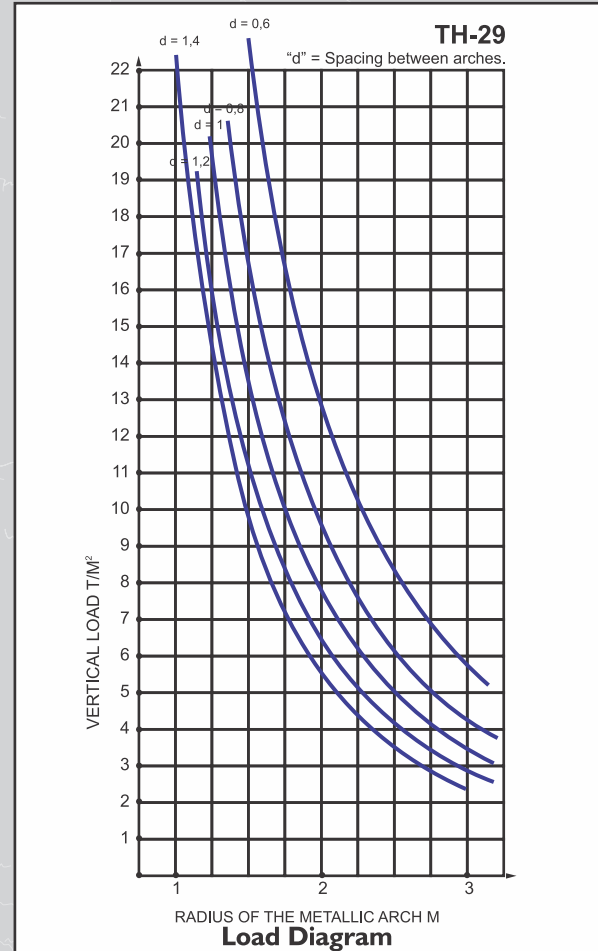
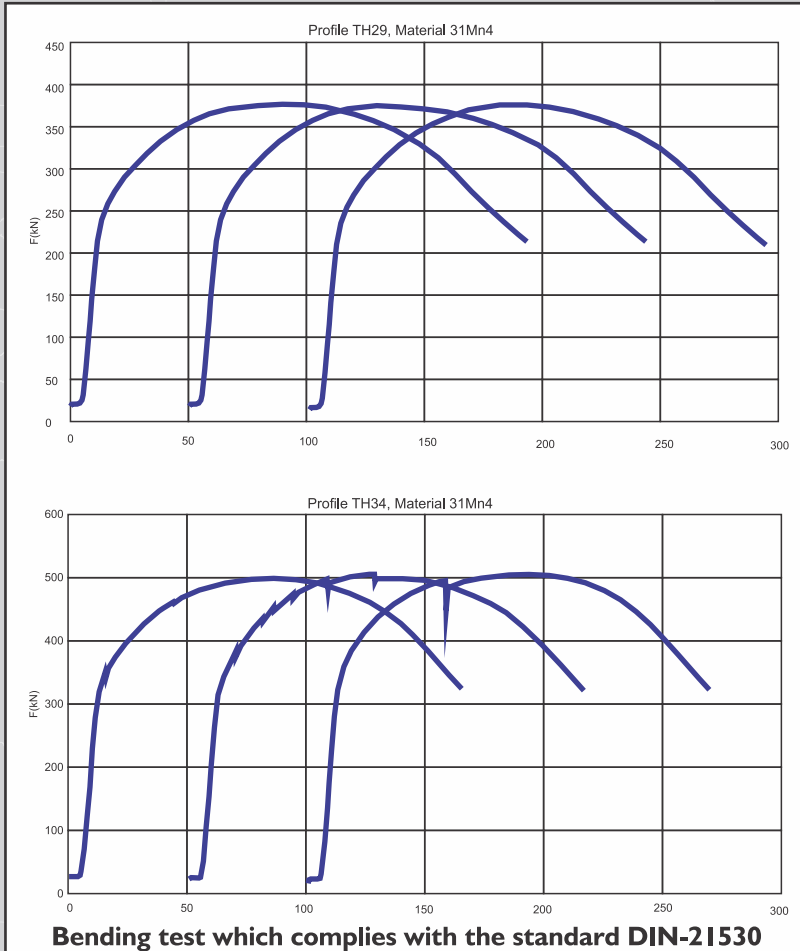
Mining Support Sections

Section Type	Weight	Area of Section	Dimensions		
			B	D	H
	kg/m	cm ²	mm	mm	mm
TH 16,5	16,70	21,26	106,00	31,00	90,00
TH21	20,92	26,65	127,00	35,00	108,00
TH 29	29,00	37,00	150,50	44,00	124,00
TH 34	33,80	43,10	171,00	50,50	136,50
TH 36	35,90	45,70	171,00	50,50	138,00
TH 40	39,90	50,84	172,00	50,00	145,00
TH 42	41,80	53,25	172,00	50,00	146,40
TH 44	43,72	55,70	172,00	50,00	147,80





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