R **INDÚSTRIAS ROMI** years 1930 - 2020

AGENDA

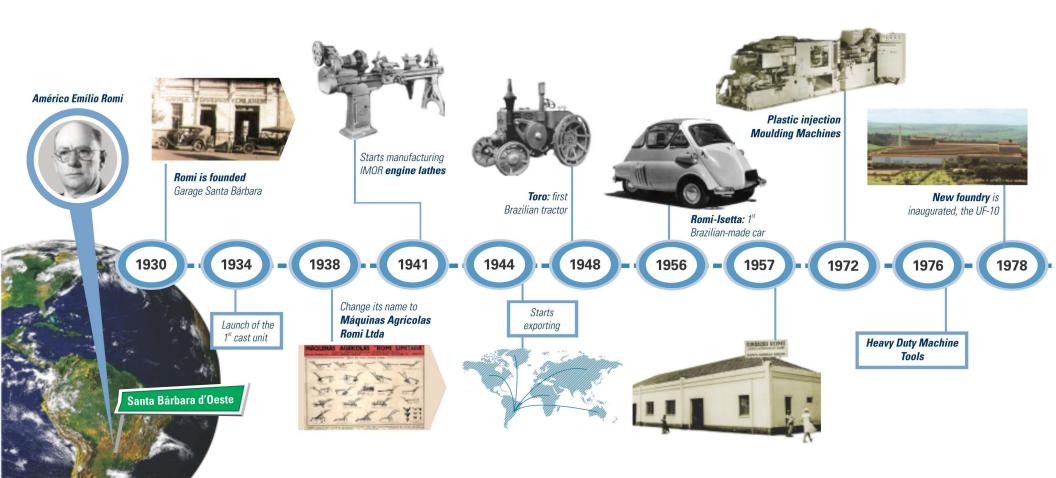




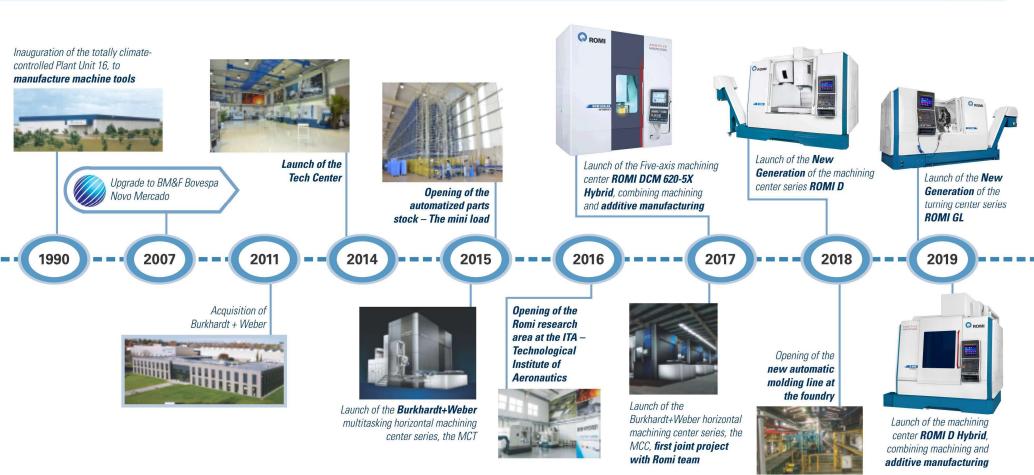
Timeline and Corporate Video
Romi Foundation
Highlights
Business units
Global Player
Brazilian manufacturing plants
Heavy Duty – C series
Heavy Duty – VT series

TIMELINE





TIMELINE





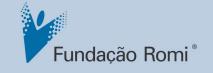
ROMI – 90 years of history in 2020





ROMI FOUNDATION

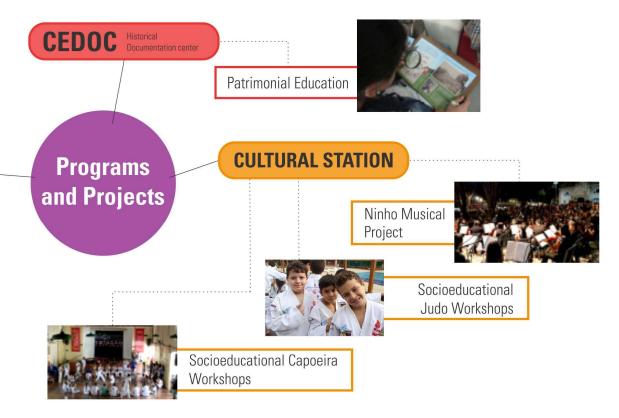




Mission: to promote social and human development through Education and Culture

In 2018, the main investments were applied in education, creative economy and combat vulnerability and social risk. More than **R\$ 4.5 million** was allocated to actions and projects that benefited **thousands of people**.





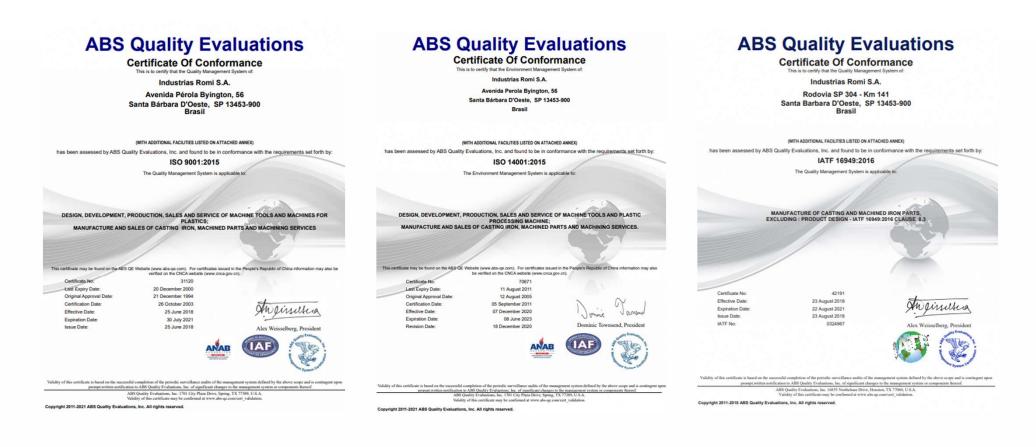
HIGHLIGHTS





CERTIFICATES





SAFETY STANDARDS





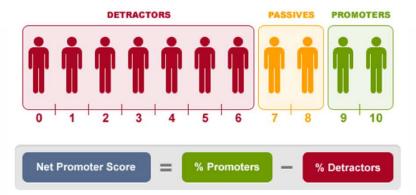
DECLARE COMPLIANCE OF THE PRODUCT

IN ACCORDANCE WITH TECHNICAL STANDARDS

Applicable Technical Standards					
ISO 13852:2003	Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs.				
ISO 13853:2003	Safety of machinery - Safety distances to prevent danger zones being reached by the lower limbs.				
ISO 13854:2003	Safety of machinery - Minimum gaps to avoid crushing of parts of the human body.				
ISO 12100:2013	Safety of machinery - General principles for design - Risk assessment and risk reduction.				
ISO 23125:2013	Machine tools - Safety - Turning machines.				
BS EN 13128:2001+A2:2009	Safety of machine tools - Milling machines (including boring machines).				
BS EN 12417:2001+A2:2009	Machine tools - Safety - Machining Centres.				

NPS – NET PROMOTER SCORE





ROMI = 67



BUSINESS UNITS



Romi machines

Burkhardt+Weber machines



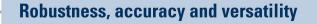
Raw and Machined Cast Iron Parts

MACHINE TOOLS









Wide portfolio: the best solutions for any size machining

High technology with excellent value

Safe and easy-to-operate equipment



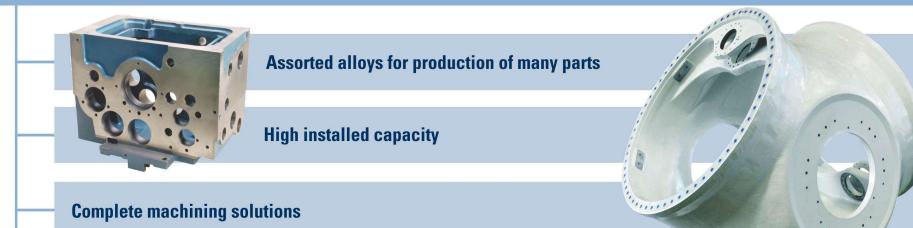
D 1250

CASTING AND MACHINED PARTS





Casting and Machined Parts



Quality and reliability

BURKHARDT+WEBER





- Special solution in manufacturing
- Customized projects
- Highly precise applications

• Manufacturing machine tools in Reutlingen – Germany since 1888



BRAZILIAN MANUFACTURING PLANTS



Manufacturing Plant 01 Light and medium machining

> Manufacturing Plant 10 Light and medium casting

Manufacturing Plant 14 Imputers and electric and electronical controls

> Manufacturing Plant 16 Assembly of Machine Tools

Manufacturing Plant 82

Manufacturing Plants 03 and 83 Metal sheet cutting, assembly and painting of enclosing

> Manufacturing Plant 11 Medium and heavy machining

Manufacturing Plant 15 Assembly of Plastic Processing Machines

> Manufacturing Plant 19 Assembly of heavy Machine Tools

Manufacturing Plant 81

Machining for customers

GLOBAL PLAYER



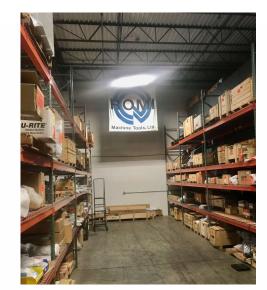


Romi Machine Tools - USA









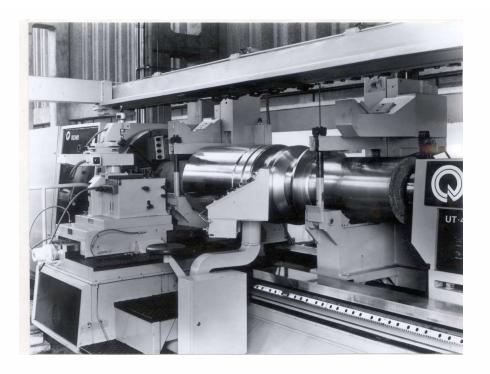


HEAVY DUTY MACHINES - HISTORY



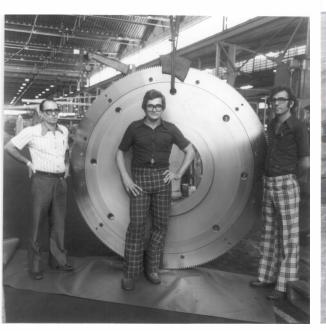


- BARRAMENTO EXTRA-PESADO, FUNDIDO EM LIGA DE ALTA QUALIDADE, COM QUIAS PRISMÁTICAS RETIFICADAS EM MÁQUINA ESPECIAL.
- ÁRVORE EM AÇO FORJADO, MONTADA EM TRÊS MANCAIS COM ROLAMENTOS CÔNICOS TIMKEN EXTRA-PESADOS.
- TODOS OS DEMAIS EIXOS TAMBÉM MONTADOS SÕBRE ROLAMENTOS.
- CABEÇOTE DE CONSTRUÇÃO COMPACTA COM ENGRENAGENS DE AÇO Ç. NI Mo, CEMENTADAS E RETIFICADAS COM OS FLANCOS DOS DENTES ACABADOS FOR RETIFICAÇÃO OU "SHAVING".
- CARRO UNIVERSAL COM DESLOCAMENTO RÁPIDO LONGITUDINAL MEDIANTE MOTOR-REDUTOR.
- MOTOR PRINCIPAL DE CORRENTE CONTÍNUA DE ALTO CONJUGADO DE PARTIDA, ALIMENTADO POR UMA UNIDADE CONVERSORA ESTÁTICA DE CORRENTE (RETIFICADORES DE SILÍCIO).
- TESTES FINAIS DE ALINHAMENTO E PRECISÃO DE ACÔRDO COM AS NORMAS "SCHLESINGER".



HEAVY DUTY MACHINES - HISTORY





08/02/1979



08/02/1979

04/05/1977

HEAVY DUTY MACHINES – CURRENT DAYS









Heavy Duty – C Series





C1100H / C1290H

Between center = 2 – 9.5 meters Swing over bed = 1,110 and 1,330mm Swing over cross slide = 720 and 950mm Max weight = 33,100 lbs Spindle = A2-20 Motor = 72HP / 53 KW

C1300H / C1600H

Between center = 3.5 - 12.5 meters Swing over bed = 1,300 and 1,600mm Swing over cross slide = 900 and 1,200mm Max weight = 48,500lbs Spindle = A2-20 Motor = 114HP / 84 KW

Heavy Duty – C Series





C1800H / C2100H

Between center = 4 – 10 meters Swing over bed = 1,800 and 2,150mm Swing over cross slide = 1,200 and 1,650mm Max weight = 66,100 lbs Spindle = A2-20 Motor = 72HP / 53 KW

C2200H / C2600H

Between center = 4 – 12 meters Swing over bed = 2,100 and 2,580mm Swing over cross slide = 1,500 and 2,030mm Max weight = 110,200 lbs Spindle = A2-20 Motor = 155HP / 114 KW

C series - Details













C series - Details













C series – CNC Siemens 840D





Heavy Duty – VT Series





Heavy Duty – VT Series









Heavy Duty – VT Series

	VT1400M	VT2000M	VT2500M	VT5000M
Chuck diameter [mm]	1,400 (55")	2,000 (79")	2,500 (99")	5,000 (197")
Max turn diameter [mm]	1,600 (63")	2,200 (87")	2,700 (106")	7,000 (275")
Max allowed height [mm]	1,650 (65")	1,650 (65")	2,250 (89")	4,000 (157")
Max speed [rpm]	335	250	180	50
Max part weight [lbs]	22,000	33,000	55,100	198,400
Power motor	84HP / 62KW	84HP / 62KW	84HP / 62KW	144HP / 108KW

Standard:

C axis Live tooling = 30 KW Tool changer magazine Vertical RAM Chip conveyor

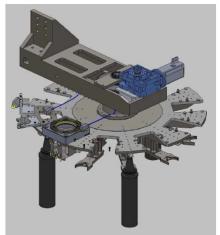
VT Series - Details













VT Series – CNC Siemens 840D







Rafael Boldorini General Manager rboldorini@romiusa.com



ROMI - Early 90s and 2000 in USA and South America

