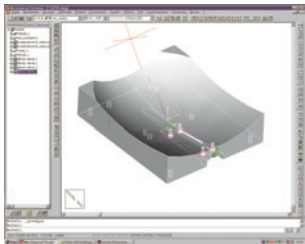
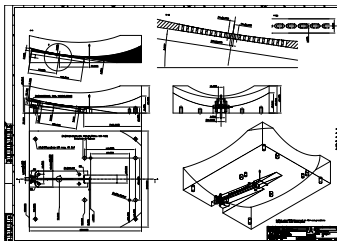




Prior to production, complex elements are modeled with our CAD systems using commercial and inhouse developed software



Mechanical Design of a microwave reflector with directional coupler based on scientific data



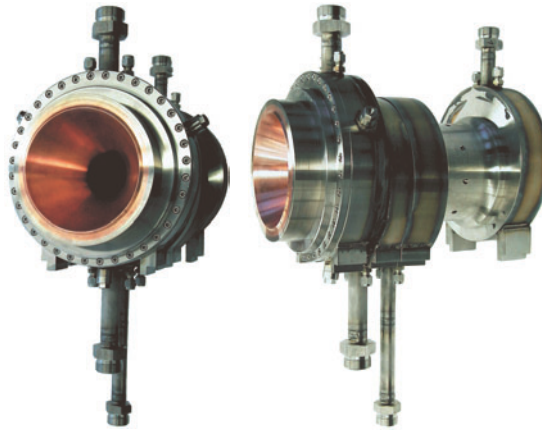
Drawings help the customer to have a final check and confirm the geometry



Fabrication and immediate quality check in a closed loop for optimum accuracy



Polished surface to ease laser alignment



Liquid hydrogen cooled missile engine
© by DLR



Microwave High Power Switch



Microwave Horn Antenna for Automobile Radar

Housing Plate for ISS Transmission Module



Hybrid Microwave High Temperature Processing System

We introduce ourselves the Reinhold Muehleisen GmbH located in the south west of Germany, an area known as the home for family run companies.

Highly specialized, small in size and flexible we are active on the international market.

Founded in 1946, we look back on decades of achievements, decades of taking challenges and a decade of expertise in the fabrication of extremely complex elements in the fields:

- automotive industrie
- racing cars and racing motor engines
- nuclear fusion technology
- microwave application
- medical equipment
- space technology

To offer complete solutions and the full range of fabrication, a unique and efficient cooperation has been established and maintained during several years with

- IMT GmbH for the design of microwave components

and partners for

- electroforming
- electron beam welding
- spark erosion
- complex measurements of mechanical dimensions

All our partner companies are located within one to two hours driving distance.

For an inquiry please send drawings as data set or on paper or feel free to send a combination thereof.

THE REINHOLD MÜHLEISEN GMBH

RM - a family owned high technology company, based in south west Germany

www.muehleisen.de





CNC-Turning up to 4 axes and up to 2.000 mm distance

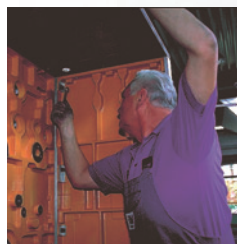


Highly qualified experts and modern machines are the foundation for high precision and success



5 axis milling centers allow a production with high productivity even for small series and maximum working part sizes of 1,7 meter

Permanent quality supervision during the production as prior to final quality control of the produced elements



Our assembly department allows us the setup and putting into operation of complex installation as well as the mounting of simple devices and elements

Based on these data we inhouse prepare production drawings and if desired leave them to our client for a final verification. The entire fabrication process will be scheduled and handled on basis of these drawings and data.

Application	Software	Workstations	Options
CAD Mechanic	AutoCAD Mechanical Desktop 5	2	Inhouse Developed Geometry Modules
CAD Electric	ECS-CAD	1	Connected to Mechanical CAD
CAM Programming	MasterCAM	1	Inhouse Developed Postprocessors
High Frequency Design	HFSS	1	Inhouse Developed Analytic Tools

Inhouse developed codes are modular linkable to commercial software, such that we can match them to the customers needs even in cases when commercially available codes fail.

CNC Lathe Type	Distance Linear [mm]			Spindle Hole D	Number of NC - Axes			Speed [1/min]	Power / Torque P [kW] / M [Nm]	max. Weight per Part [kg]	Options
	Y	Z	D		tot.	lin.	rot.				
Primus II CNC		470	250	51	3	2	1	5.000	19	2	tailstock toolmeas.
CTX500E	+/-50	2.097	450	107	4	3	1	4.300	30/540	11	tailstock toolmeas. steady

RM has more to offer than fabrication due to drawings. Based on our and our partner companies knowledge since one decade we provide

Design Work

- Mechanical and electrical construction
- Microwave design
- Optimising of existing microwave processing systems

CNC Milling Type	Distance linear [mm]			Angle [°]		Number of NC-Axes			Speed [1/min]	Part Weight [kg]
	X	Y	Z	B	C	tot.	lin.	rot.		
BFT 105/1	1.750	1.250	1.250	360		5	4	1	2.500	4.000
FP 5 NC	710	600	500			3	3		6.300	550
DMU 60 P	600	650	550	-30 +45	360	5	3	2	12.000	600
DMU 80 P	800	700	600	-30 +45	360	5	3	2	12.000	600
FP 4 NC	560	500	450			3	3		6.300	450
DMU 50 V	500	380	380	180	360	5	3	2	16.000	200
FP 2 NC	300	300	340		360	4	3	1	5.000	150

Processing Systems

- high / low temperature application
- controlled atmosphere
- low and high pressure apparatus
- plasma processing systems
- In-house designed microwave components

Measurement Instrument	Dimensions of the Part [mm / °]			Type of Measurement	Part Weight [kg]
	X	Y	Z / C		
Zeiss Spectrum 700 RDS / RST	700 930	1.000 1.346	580 580	3D - CNC - CMM Measurement Software: Calypso connected to CAD / CAM	730
Numerex CS-2828	700 800	700 1.050	450 555	3D - Coordinate Meas.-System connectet to CAM	100
Kelch Kalimat 300 EA9 Expert	150	410	360	CNC - Toolmeasurement digitale image processing connectet to CAM	100
Mitutoyo Surftest SJ 301	50 mm with 0,75 mN			Surface - Measurements based on DIN, ISO, ANSI, JIS	



We look forward to serve your needs.

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