

**MORE**  
INNOVATION IN STEELMAKING

STEP BY STEP



AT YOUR  
SIDE









Since 1984 , technological research and development has been the backbone of MORE and the building block for the future development of advanced products and services

For us, it is vital to meet evolving customer demands with high performance solutions. Highly skilled engineers are constantly working to study new products. This makes us forerunners in the exploration and industrial application of new technological solutions

MORE manufactures and assembles all equipment which is then subjected to trial tests prior to delivery. This ensures that thorough checks are carried out on both working sequences and functionality

pag. 4

pag. 5

pag. 6

EVALUATION

MANUFACTURING

DESIGN

S T E P

BY

S T E P



pag. 8

pag. 10

pag. 12

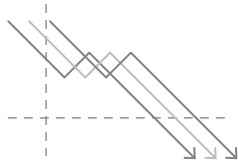


AT YOUR  
SIDE

# EVALUATION

OUR EXTENSIVE WORKSHOP FACILITY, STAFFED BY OUR OWN EXPERIENCED ENGINEERS, WILL WORK WITH YOU TO ASSESS THE MOST COST EFFECTIVE SOLUTION WITHOUT LOSING PERFORMANCE

ANALYSIS FOR  
REDUCTION OF  
TRANSFORMATION  
COSTS



FEASIBLE  
INSTALLATION  
STUDIES



HEAT AND MASS  
BALANCE  
CALCULATION



ON SITE SURVEY BY  
PROCESS, MECHANICAL  
AND AUTOMATION  
EXPERTS







## DESIGN

TAILOR MADE  
INSTALLATION  
MEET THE **EXACT**  
**REQUIREMENTS**  
OF OUR CUSTOMER

**A PROJECT MANAGEMENT TEAM**  
coordinates mechanical, electrical  
and system automation activities  
related to a project, from the  
feasibility study up to the final  
performance and acceptance test

Mechanical, electrical and  
automation design activities are  
performed by **INTERNAL  
SPECIALISTS** with extensive  
experience in steelmaking

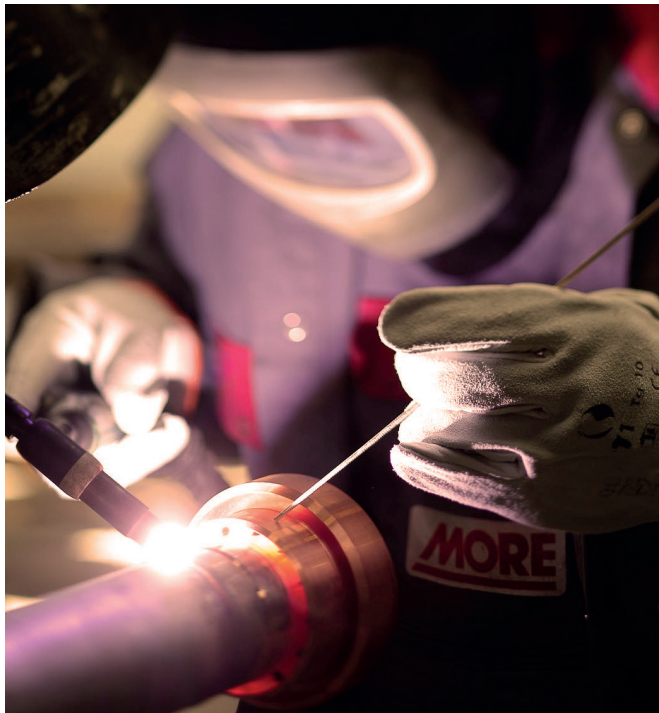
The technical department makes  
use of **UP-TO-DATE SOFTWARE**  
such as CAD/CAE/CAM and  
Computational Fluids Dynamic  
(CFD) to perform its tasks  
without compromise



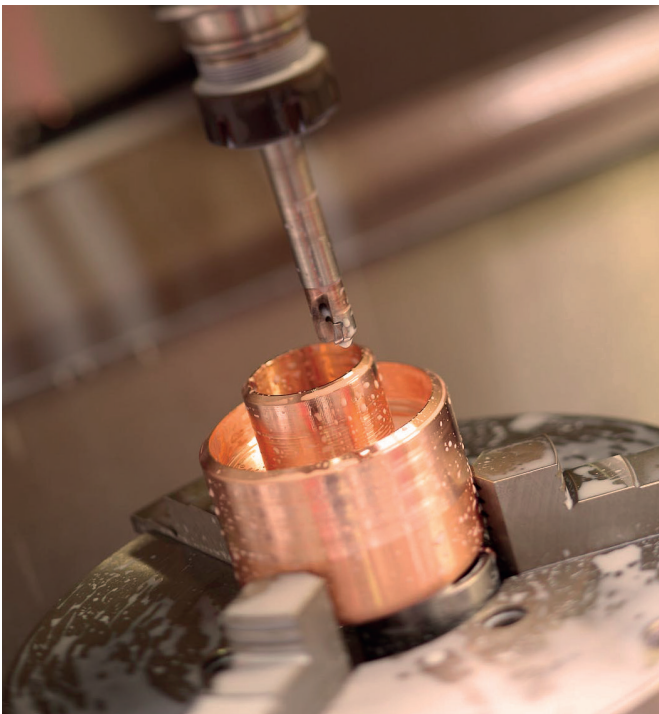


MIG-TIG  
welding stations

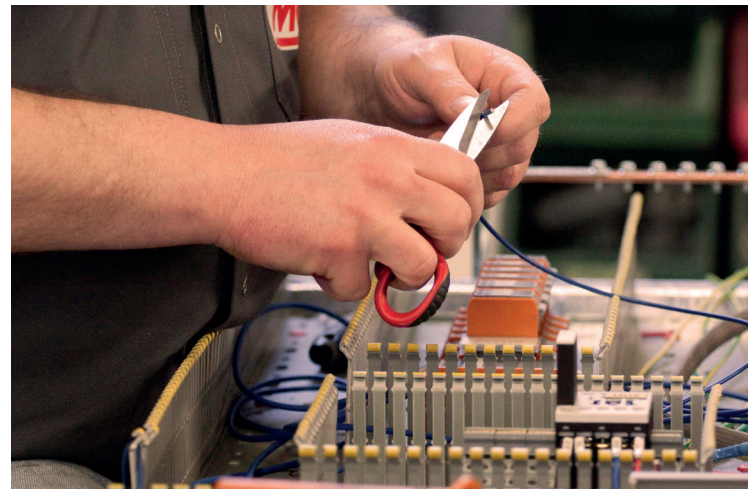
(welders certified  
in accordance with  
Appendix 1, point 3.1.2  
of 2014/68/EU  
directive)



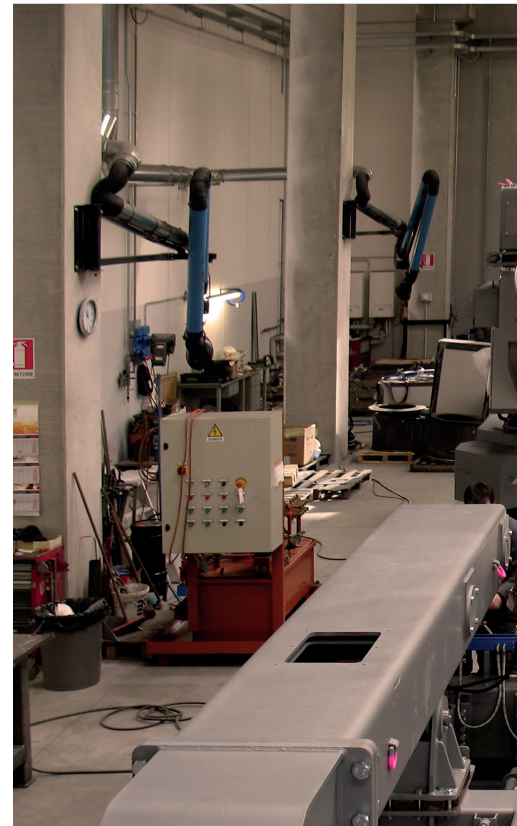
CNC  
machineries



Electric  
assembly  
and testing



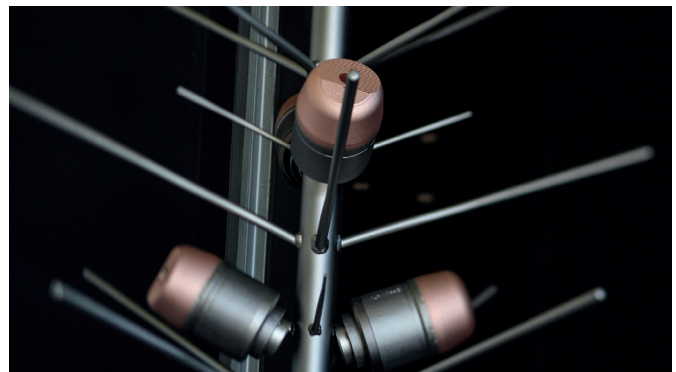
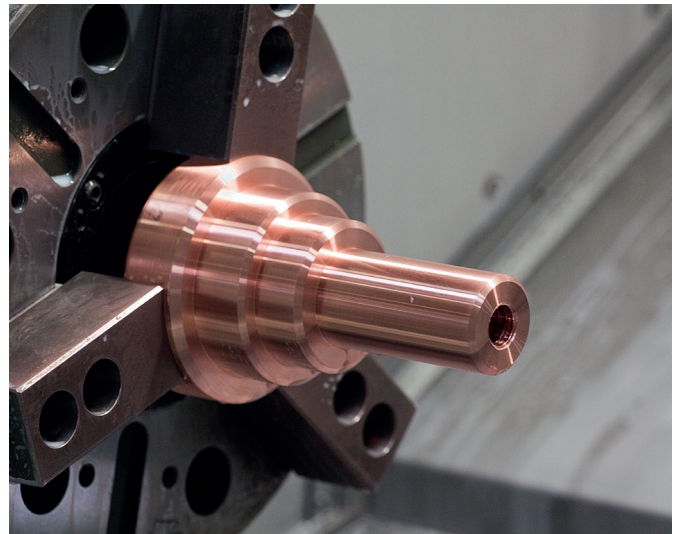
Mechanical assembly  
and testing lines



TO ENSURE **QUALITY, RELIABILITY AND  
SAFE EQUIPMENT**; MANUFACTURING  
AND ASSEMBLY IS **ENTIRELY CARRIED  
OUT IN MORE'S WORKSHOP**

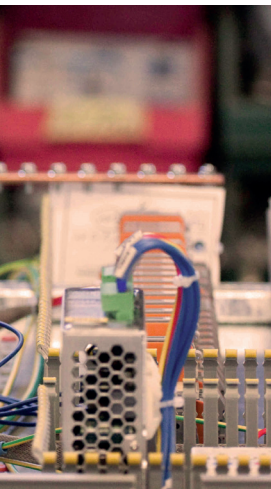


Turning  
centers



Sand  
blasting  
machine

Spray painting  
tunnel



Hydraulic  
pneumatic/gas  
test bench



- MIG-TIG WELDING
- CNC MACHINERIES
- TURNING CENTERS
- MECHANICAL ASSEMBLY AND TESTING LINES
- ELECTRIC ASSEMBLY AND TESTING LINES
- HYDRAULIC PNEUMATIC/GAS TEST BENCH
- SAND BLASTING MACHINE
- SPRAY PAINTING TUNNEL

The warehouse, manufacturing and assembly buildings cover over 5.000 m<sup>2</sup> / 6,000 yd<sup>2</sup> and are equipped with the state of the art facilities for welding, manufacturing and assembly



**PRESSURE TEST**

**ELECTRICAL SYSTEM TEST**

**MECHANICAL FUNCTIONALITY TEST**

**PNEUMATIC & HYDRAULIC  
FUNCTIONALITY TEST**

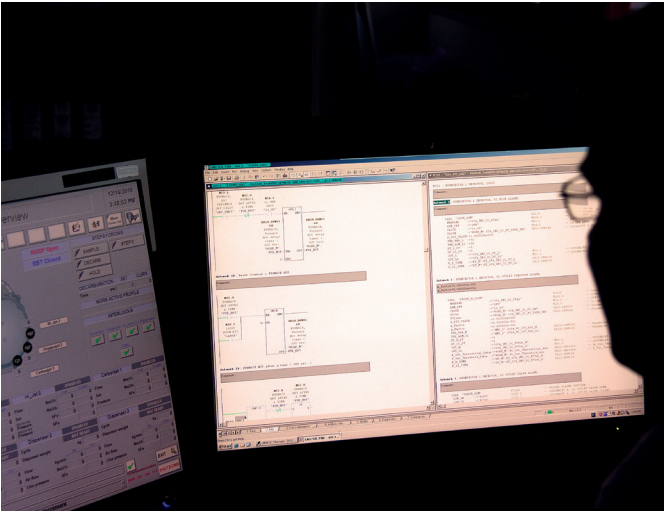
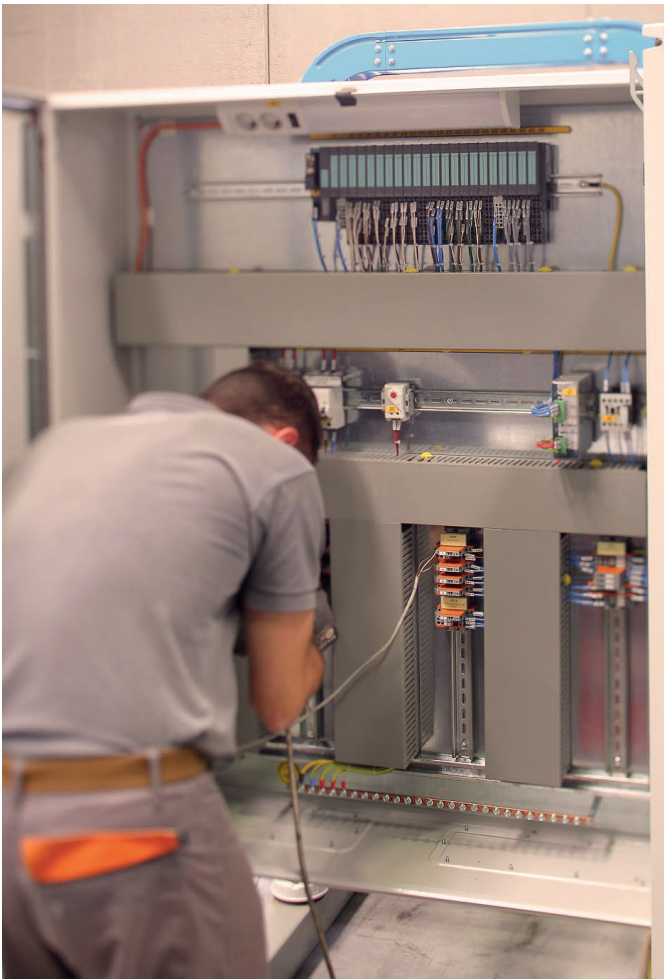
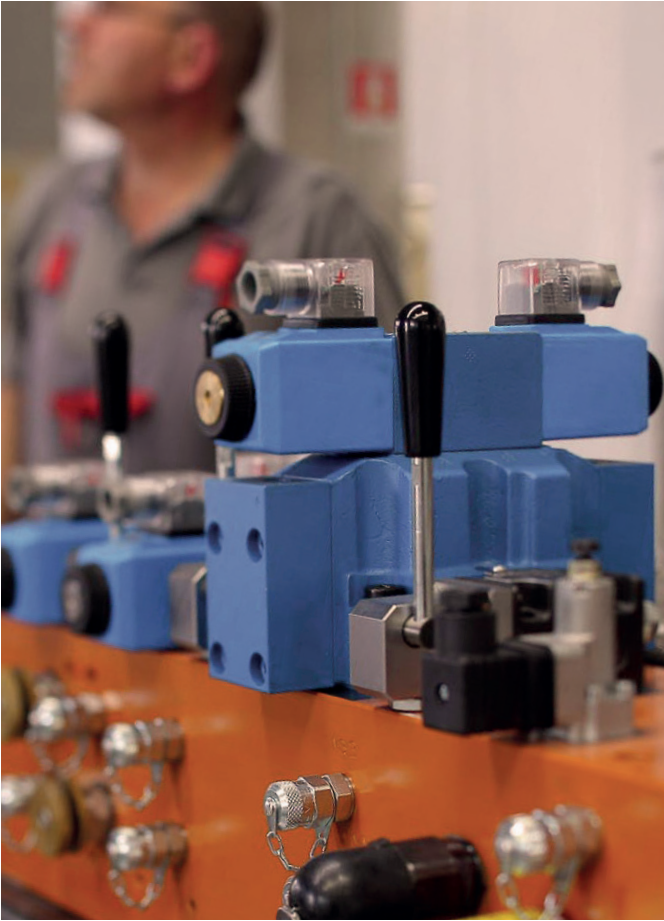
**AUTOMATION AND HMI  
-HUMAN MACHINE INTERFACE-  
TEST**

**X-RAY AND LIQUID PENETRANT  
INSPECTIONS FOR WELDS QUALITY  
TESTING**

---

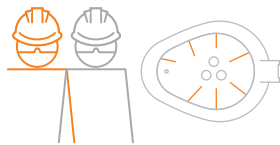
BEFORE DELIVERY,  
THE EQUIPMENT  
**IS ASSEMBLED**  
**AND TESTED IN-HOUSE**  
TO CHECK THE WORKING  
SEQUENCES  
AND FUNCTIONALITY  
TO ENSURE EASY  
ON-SITE INSTALLATION  
AND START-UP





# V INSTALLATION

OUR TEAM INCLUDES EXPERIENCED **AUTOMATION**  
AND **MECHANICAL ENGINEERS** AS WELL AS **HIGHLY SKILLED**  
**PROCESS SPECIALISTS** SUPPORTING OUR CUSTOMERS  
ALONG THE ENTIRE CHAIN FROM ERECTION TO START-UP  
AND FINAL ACCEPTANCE OF THE SUPPLIED EQUIPMENT



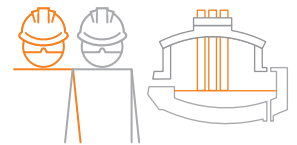
**ERECTION,  
COLD START-UP  
ASSISTANCE**



**HOT START-UP  
ASSISTANCE**



**PRODUCTION AND  
MAINTENANCE  
TRAINING**



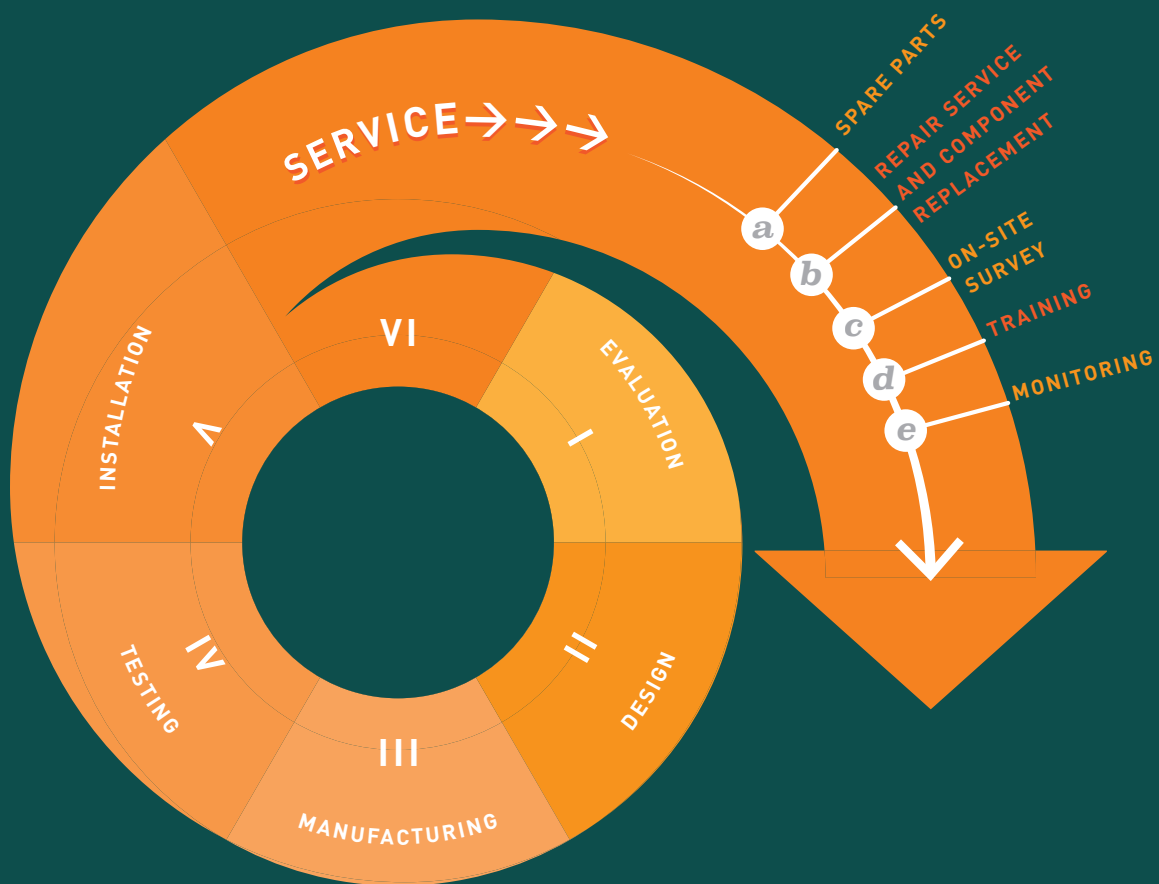
**PRODUCTION  
ASSISTANCE**



The team focuses on installing equipment that facilitates production and monitoring operations, giving theoretical and practical training to your staff while complying with the most stringent safety codes



PROCESS ANALYSIS - TECHNICAL AND PROCESS ENGINEERS  
ARE AVAILABLE FOR IMPROVEMENTS, PROBLEM SOLVING,  
TRAINING AND TECHNICAL ADVICE



**MORE OFFERS THE SERVICE  
OF EXPERIENCED STEEL  
MAKING AND PROCESS  
SPECIALISTS THAT CAN MEET  
CLIENTS' NEEDS RELATED TO:**

1. Process evaluation & analysis
2. Operational improvements and process optimization
3. Reduction of transformation costs
4. Chemical package assistance
5. Production assistance
6. On-site training



# SPARE PARTS

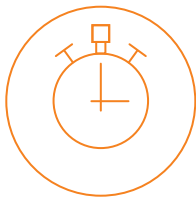
MORE'S QUALIFIED CUSTOMER SUPPORT TEAM,  
TOGETHER WITH MANUFACTURING FLEXIBILITY,  
CAN GUARANTEE A **FAST ON-TIME DELIVERY**  
**OF ORDERED COMPONENTS**

By using original spare parts, you will be able to maintain excellent operational capacity of your equipment and at the same time reduce your maintenance costs

Thanks to the continual adjustment of our stocks, we are able to guarantee fast delivery of all standard parts



## YOUR ADVANTAGES



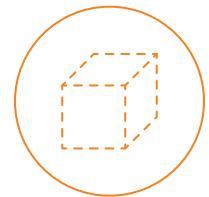
**EXPRESS SERVICE  
FOR SHORT DOWNTIMES  
OF YOUR SYSTEM**



**INDIVIDUAL  
CUSTOMER SUPPORT  
(LANGUAGES: DE, EN,  
FR, ES, IT)**



**REPAIR, SERVICE  
AND COMPONENT  
REPLACEMENTS**



**CUSTOMIZED  
SPARE PART  
PACKAGES**

# b. REPAIR SERVICE

They can be sent  
to our facilities  
and maintenance centers  
located in Italy and U.S.A.  
for repair and refurbishing

The components are inspected  
followed by reworking,  
replacements or upgrading

Operations are carried-out  
by qualified personnel in our state  
of the art workshop

REPAIR AND COMPONENT REPLACEMENT  
SERVICES FOCUS ESPECIALLY ON ELEMENTS  
SUBJECT TO HIGH STRAIN WHICH ARE CRITICAL  
TO THE AVAILABILITY OF THE CHEMICAL ENERGY  
PACKAGE SYSTEM: INJECTORS, BURNERS  
AND COPPER BULGED BLOCK PARTS

- **SHORT RESPONSE TIME  
IN CASE OF EQUIPMENT FAILURE  
TO REDUCE DOWN TIMES**
- **FAILURE ANALYSIS AND REPORTING**
- **POSSIBLE IMPROVEMENTS DURING REPAIRS**
- **THE REPAIRED COMPONENTS  
ARE TESTED BEFORE DELIVERY**





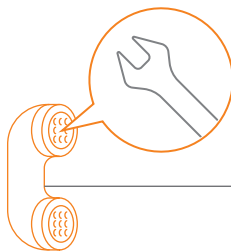
## ON-SITE SURVEY

PROFESSIONAL **MAINTENANCE**  
**OF YOUR PLANT AT REGULAR INTERVALS**  
ENSURES LONG-TERM DURABILITY AND  
RELIABILITY IN YOUR PRODUCTION PROCESS

AS PRECAUTIONARY MEASURES, WE OFFER VARIOUS SERVICES



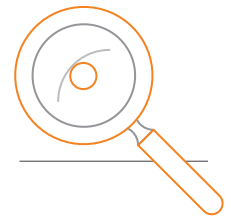
**MAINTENANCE**



**REPAIR  
RECOMMENDATIONS**



**PRODUCTION  
CONSULTING**



**INSPECTIONS**

## TRAINING

THE TEAM FOCUSES ON INSTALLING EQUIPMENT  
THAT FACILITATES PRODUCTION AND MONITORING  
OPERATIONS, GIVING THEORETICAL AND PRACTICAL  
TRAINING TO YOUR STAFF WHILE COMPLYING WITH  
THE MOST STRINGENT SAFETY STANDARDS

## MONITORING

ON-LINE MONITORING  
AND ANALYZING PLANT EQUIPMENT  
BY **REMOTE CONNECTION**







# MORE

---

## SERVICE CONTRACT

WITH THE **MORE SERVICE CONTRACT**,  
GETTING MORE THAN YOU EXPECT...  
MANY CUSTOMERS ARE ALREADY CERTAIN OF THE  
BENEFITS OF TAKING OUT A SERVICE CONTRACT  
WHEN PURCHASING INDUSTRIAL EQUIPMENT.  
**WHY? IT GUARANTEES:**

---

High availability  
and high productivity  
of your machine

---

Higher profit  
through constant  
high production output

---

Lower maintenance  
and repair costs

---

Simple cost  
calculation – additional expenses  
are easy to calculate due  
to regular maintenance

---

Savings through  
discounts on original  
spare parts and hourly  
labor rates

---

### WHAT IS THE BENEFIT FOR YOU?

- Regular maintenance & service at defined intervals, including checking and documentation of the equipment functions on the basis of machine-related check lists
- Express service for short downtimes of your system
- Optimization of parts inventory
- Customized spare part packages
- Equipment lifetime extension
- Professional operator training
- Discounts on hourly rates for MORE engineers and spare parts
- Individual customer support (languages: DE, EN, FR, ES, IT)
- Repair, service and component replacements





# CUSTOMERS

## EUROPE

BOEHLER EDELSTAHL  
BYELORUSSIAN STEEL WORKS  
DUFERCO  
ENGINEERING STEEL BELGIUM  
INDUSTEEL BELGIUM  
THY MARCINELLE  
ARCELORMITTAL ZENICA  
STOMANA  
OUTOKUMPU - TORNIO WORKS  
OVAKO IMATRA  
ALPA  
ASCOMETAL - Usine DeFos  
ASCOMETAL - Usine Des Dunes  
ASCOMETAL - Usine de Hagondange  
INDUSTEEL - Loire  
ITON SEINE  
SAM - MONTEREAU  
SAM - NEUVES MAISONS  
VALLOUREC & MANNESMANN TUBES  
WINOA  
ARCELORMITTAL HAMBURG  
B.E.S. BRANDENBURGER  
ELEKTROSTAHLWERKE  
BGH EDELSTAHL - FREITAL  
BGH EDELSTAHL - SIEGEN  
GEORGMARIENSHUTTE  
GONTERMANN-PEIPERS  
HES HENNIGSDORFER ELEKTROSTAHLWERKE  
STAHLWERK THURINGEN  
HALYVOURGIKI  
HELLENIC HALYVOURGA  
SIDENOR  
SOVEL  
O.R.I MARTIN  
RUBIERA SPECIAL STEEL  
ACCIAIERIA DI RUBIERA  
ACCIAIERIE BERTOLI SAFAU  
ACCIAIERIE DI SICILIA  
ACCIAIERIE DI VERONA  
ACCIAIERIE VALBRUNA - VICENZA  
ACCIAIERIE VALBRUNA - BOLZANO  
AFV ACCIAIERIE BELTRAME  
ALFA ACCIAI  
COGNE ACCIAI SPECIALI  
TENARIS DALMINE  
FERRIERA VALSABBIA  
LEALI STEEL  
NUNKI STEEL  
TRAVI E PROFILATI DI PALLANZENO  
THYSSENKRUPP ACCIAI SPECIALI - TERNI  
ARCELORMITTAL BELVAL & DIFFERDANGE  
MAKSTIL  
JSCC MOLDOVA STEEL WORKS  
CELSA ARMERINGSSTAL

ARCELORMITTAL WARSZAWA  
CMC POLAND  
HSW-HUTA STALI JAKOSCOWYCH  
ISD HUTA CZESTOCHOWA  
SIDERURGICA NACIONAL - SEIXAL  
ARCELORMITTAL HUNEDOARA  
TENARIS SILCOTUB  
VOLGOTSEMMASH J.S.C. (VCM)  
PJSC ASHINISKIY METALLURGICAL  
WORKS (AMET)  
BVK  
OMK - VYKSA STEEL WORKS  
UMMC SERV V WORKS  
SEVERSTAL  
URALMASHZAVOD  
TAGAN ROD METALLURGIC  
ZELEZIARNE POBREZOVÁ  
ACRONI  
A.G. SIDERURGICA BALBOA  
ACERINOX  
ARCELORMITTAL SESTAO  
CORRUGADOS AZPEITIA  
CORRUGADOS GETAFE  
MEGASA SIDERURGICA SL  
MEGASIDER  
SIDENOR  
SIDERURGICA SEVILLANA  
OVAKO SWEDEN AB  
DONETSK ELECTROMETALLURGICAL PLANT  
ALPHASTEEL LTD  
CELSA MANUFACTURING

## NORTH AMERICA

ALTASTEEL  
ARCELORMITTAL DOFASCO  
ARCELORMITTAL MONTREAL  
EVRAZ  
GERDAU - MANITOBA  
HAMILTON SPECIALITY BAR  
AK STEEL - BUTLER  
AK STEEL - MANSFIELD  
ALTON STEEL  
AP GALLATIN HOEGANAES  
ARCELORMITTAL - GEORGETOWN  
ARCELORMITTAL - COATESVILLE  
CHARTER STEEL - WISCONSIN  
CHARTER STEEL - OHIO  
CMC STEEL - ALABAMA  
CMC STEEL - ARIZONA  
CMC STEEL - OKLAHOMA  
CMC STEEL - SOUTH CAROLINA  
CMC STEEL - TEXAS  
ELLWOOD QUALITY STEELS  
EVRAZ ROCKY MOUNTAIN  
GALLATIN STEEL  
GERDAU - MIDLOTHIAN  
GERDAU - MONROE  
GERDAU - CARTERSVILLE

GERDAU - BEAUMONT  
GERDAU - JACKSONVILLE  
GERDAU - FT. SMITH  
GERDAU - JACKSON  
GERDAU - PETERSBURG  
GERDAU - RANCHO CUCAMONGA  
GERDAU - CHARLOTTE  
GERDAU - JACKSON  
GERDAU - KNOXVILLE  
GERDAU - SAYREVILLE  
GERDAU - ST. PAUL  
GERDAU - WILTON  
HOEGANAES  
KEYSTONE STEEL & WIRE  
MID AMERICAN STEEL & WIRE  
NLMK INDIANA  
NORTH AMERICAN STAINLEES  
NORTH STAR BLUESCOPE STEEL  
NUCOR STEEL - BERKELEY  
NUCOR STEEL - SEATTLE  
NUCOR STEEL - AUBURN  
NUCOR STEEL - BIRMINGHAM  
NUCOR STEEL - NEBRASKA  
NUCOR STEEL - CRAWFORDSVILLE  
NUCOR STEEL - DECATUR  
NUCOR STEEL - HERTFORD  
NUCOR STEEL - JACKSON  
NUCOR STEEL - JEWETT  
NUCOR STEEL - KANKAKEE  
NUCOR STEEL - MARION  
NUCOR STEEL - MEMPHIS  
NUCOR STEEL - SOUTH CAROLINA  
NUCOR STEEL - TUSCALOOSA  
NUCOR STEEL - UTAH  
NUCOR YAMATO  
REPUBLIC STEEL  
REPUBLIC STEEL - LORAIN  
SSAB - ALABAMA  
SSAB - IOWA  
STEEL DYNAMICS - COLUMBUS  
STERLING STEEL  
THE TIMKEN COMPANY  
UNITED STATES STEEL

## CENTRAL/SOUTH AMERICA

ACERBRAG  
GERDAU SIPAR  
SIDERCA  
ARCELORMITTAL - CARIACICA  
ARCELORMITTAL - JUIZ DE FORA  
ARCELORMITTAL - PIRACICABA  
ARCELORMITTAL - TIMOTEO  
COMPANHIA SIDERURGICA NACIONAL  
GERDAU - USIBA  
GERDAU - MOGI  
GERDAU - PINDAMONHANGABA  
HOGANAS BRASIL  
VILLARES METALS

VOTORANTIM SIDERURGIA - RESENDE  
VOTORANTIM SIDERURGIA - BARRA MANSA  
SIDELPA - SIDERÚRGICA DEL PACIFICO  
ACINOX SA  
METAL DOM  
ANDEC  
ACEROS DE GUATEMALA  
ACEROS DM  
DEACERO - RAMOS  
DEACERO - CELAYA  
DEACERO - SALTILLO  
GSIM DE OCCIDENTE SA DE CV  
GERDAU - SAHAGUN  
GERDAU - SIDERTUL  
SIMEC  
TYASA  
TERNIUM MEXICO - GUERRERO  
TERNIUM MEXICO - APODACA  
TUBOS DE ACERO DE MEXICO (TAMSA)  
CORPORACION ACEROS AREQUIPA  
EMPRESA SIDERURGICA DEL PERU'  
ARCELORMITTAL - POINT LISAS  
COMPLEJO SIDERURGICO NACIONAL  
SIDERURGICA DEL ORINOCO

## AFRICA

ALGERIA QATARI STEEL  
AL EZZ DEKHEILA  
AL EZZ FLAT STEEL  
AL EZZ STEEL REBARS  
BESHAY STEEL  
SUEZ STEEL  
THE ARAB COMPANY FOR SPECIAL STEEL  
METALS & ENGINEERING CORP. (METEC)  
MAGHREB STEEL  
ACIERIE ELECTRIQUE DE SONASID  
ARCELORMITTAL - VANDERBIJLPARK  
ARCELORMITTAL - VEREENING  
ARCELORMITTAL - SALDANHA  
CAPE GATE

## MIDDLE EAST

SULB COMPANY  
IRAN ALLOY STEEL COMPANY (IASCO)  
KHORASHAN STEEL COMPLEX  
KHOUZESTAN STEEL COMPANY (KSCI)  
MOBARAKEH STEEL COMPANY (MSC)  
SABA STEEL COMPLEX  
AL-ASSEMAH STEEL (RAJHI)  
SAUDI IRON & STEEL COMPANY (HADEED)  
UNITED STEEL INDUSTRIAL  
JINDAL SHADEED IRON & STEEL LLC  
SOHAR STEEL  
AGHA STEEL  
QATAR STEEL  
ASIL CELIK  
CEBITAS DEMIR CELIK  
COLAKOGLU METALURJI  
KROMAN CELIK  
MMK  
BASTUG  
EMIRATES STEEL

## OCEANIA

ONESTEEL WARATAH  
ONESTEEL SYDNEY  
ONESTEEL LAVERTON









## CONTACTS

### **SERVICE**

[service@more-oxy.com](mailto:service@more-oxy.com)

### **SPARE PARTS**

[spares@more-oxy.com](mailto:spares@more-oxy.com)

MORE S.r.l.  
Via Santa Lucia, 7  
33013 Gemona del Friuli  
Udine - Italy

Phone + 39 0432 973511  
Fax +39 0432 970676

[info@more-oxy.com](mailto:info@more-oxy.com)  
[www.more-oxy.com](http://www.more-oxy.com)

Photo by Miki Biasutti  
Art direction: [nelquadrato.com](http://nelquadrato.com)





**MORE** S.r.l. 33013 Gemona del Friuli (UD) Italy  
**T** +39 0432 973511 **F** + 39 0432 970676  
Email: [info@more-oxy.com](mailto:info@more-oxy.com) [www.more-oxy.com](http://www.more-oxy.com)