SYSTEM TIVAR® ENGINEERING
TURNKEY SOLUTIONS

MITSUBISHI CHEMICAL GROUP

Mitsubishi Chemical
Advanced Materials GmbH

System TIVAR™ Engineering Linings

Project evaluation

From design to turnkey installation

Mitsubishi Chemical Group partners with you to develop bespoke lining solutions that make the handling of bulk materials safer, faster, easier and more efficient.

Please specify your problem as detailed as you can.
This is important for developing a specific and tailor-made solution.

Bulk material:

Bulk material type: _____

Particle size (mm): max. _____ min. _____

Particle form: ☐ round ☐ sharp-edged ☐ lignitic

Density (kg/cm³): _____

Moisture content (%): _____

Bulk material temperature (°C): max._____ min. _____

Plant/Component:

Number: _____

☐ Hopper ☐ Silo ☐ Bunker ☐ Chute
☐ Tipper body ☐ Wheel loader bucket ☐ Wagon
☐ Other _____

Construction material:

☐ Steel ☐ Concrete ☐ Aluminium
☐ Other _____

Wall thickness (mm): _____

Existing lining: ☐ yes ☐ no
Type: _____
Thickness: _____

Location ☐ inside ☐ outside

Ambient temperature (°C):

max. _____
min. _____
Direct sunlight: ☐ yes ☐ no

Filling:

☐ continiously ☐ discontinuously
☐ centered ☐ decentered

Impact wear:

Material directly hitting wall?
Impact wear: ☐ yes ☐ no

Continuous material buffer in the plant?

☐ yes ☐ no, with intermissions _____

Drop height (m): _____

Throughput (t/h): _____

Operating time (h/day): _____

Problem description:

Impact wear: ☐ yes ☐ no

Risk of explosion: ☐ yes ☐ no

Malfunction due to:

☐ Sticking ☐ Bridging ☐ Freezing
☐ Corrosion ☐ Segregation
☐ Other _____

Affected area:

☐ Hopper/slanted walls ☐ vertical walls
☐ Other _____

Please describe major pain points that need to be solved

_____
_____
_____
_____
_____

Timeline:

Which stage of the decision-making process are you in?

☐ Evaluation ☐ Supplier selection
☐ Awarding contract

When is the implementation scheduled?

_____
_____
_____

By when is budget expected to be available?

_____
_____
_____

Installation options:

Lift/Crane available on site: ☐ yes ☐ no

Accessibility for assembly:

☐ Inspection opening ☐ Manhole ☐ Inlet/outlet

☐ Other _____

Self-install under guidance possible? ☐ yes ☐ no

Your contact details:

Company: _____

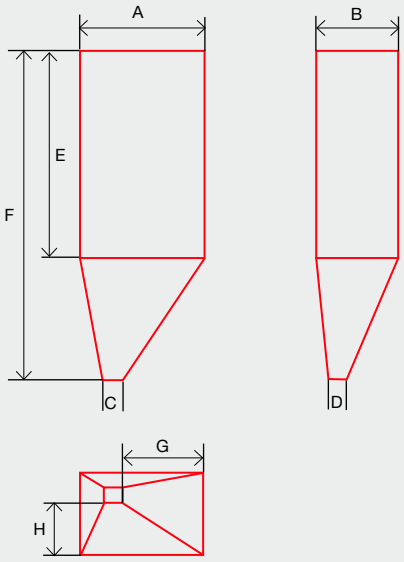
Name: _____

Email: _____

Phone/Mobile: _____

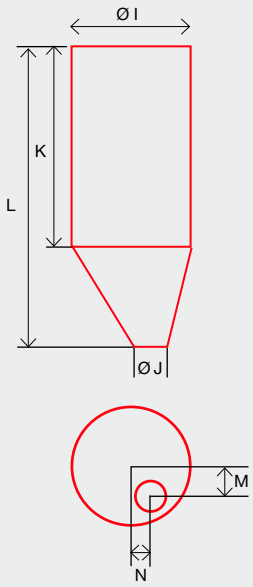
Please provide drawings, models and pictures of the system. Optionally, please specify dimensions.

Bunker/Silo/Hopper
Rectangular



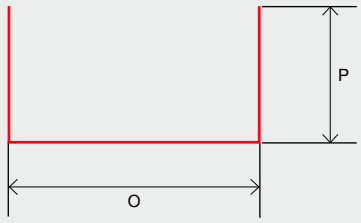
A (mm) _____
B (mm) _____
C (mm) _____
D (mm) _____
E (mm) _____
F (mm) _____
G (mm) _____
H (mm) _____

Bunker/Silo/Hopper
Cylindrical



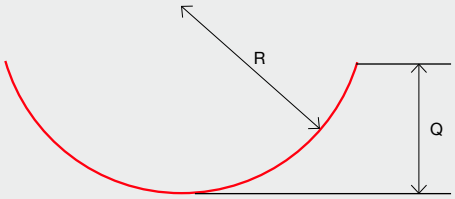
I (mm) _____
J (mm) _____
K (mm) _____
L (mm) _____
M (mm) _____
N (mm) _____

Troughs/Chutes
Rectangular



O (mm) _____
P (mm) _____
Length _____
Slope _____

Troughs/Chutes
Round



Q (mm) _____
R (mm) _____
Length _____
Slope _____

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For more information please visit our **Lining Solutions** website.

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