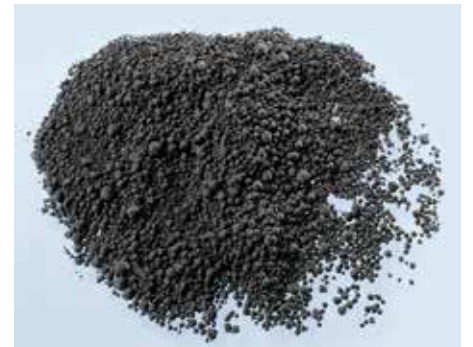
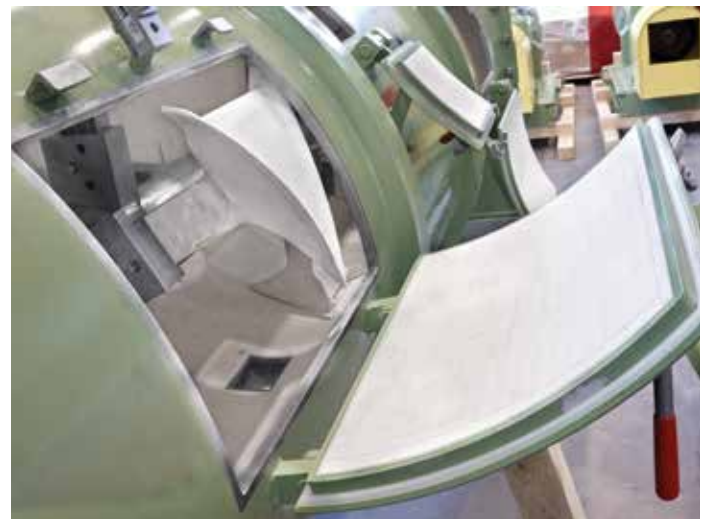


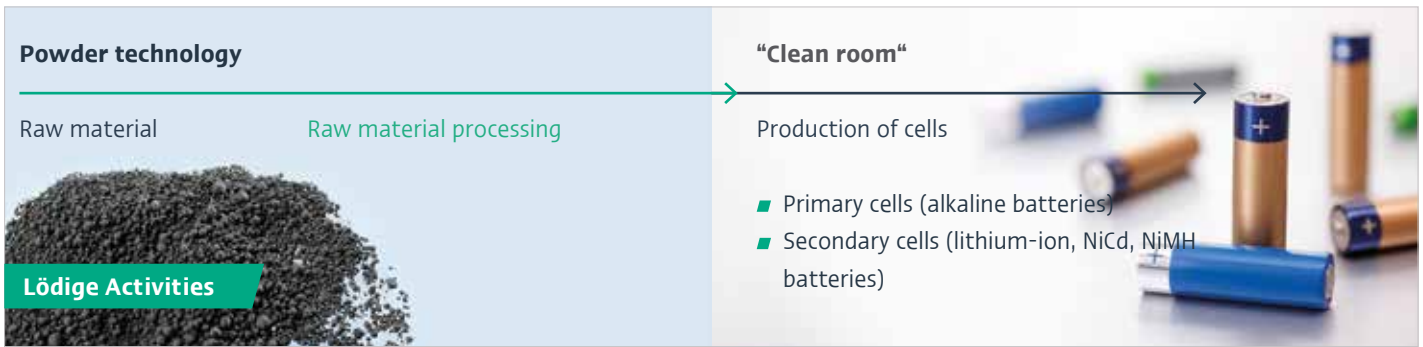
LÖDIGE PLOUGHSHARE® MIXER FOR THE PRODUCTION OF BATTERY MASSES



- Mixing drum with special lining
- Mixing shovels with ceramic coating
- Standard machine size 3,000 l



ALWAYS THE RIGHT MIX



Ploughshare® Mixer for the production of battery masses

Advantage: several process steps are performed in one machine

- Mixing of solids
- Addition of liquids
- Agglomeration
- Coating
- Creating suspensions and pastes
- Heating/cooling

Features of the Lödige machines

- Mixing drum lined inside with ceramic tiles
- Mixing shovels lined with ceramic oxide
- Main shaft sealing with special cartridge seal
- Larger mixers equipped with an additional sampling door
- Pneumatic unit centralised on a mounting plate

Solution provided by Lödige

Machine specifically designed for the product and process

- Machine sizes from 5 liters (laboratory purpose) and larger
- Product contact parts in stainless steel/special alloys/ high-temperature resistant steels/non-metallic materials
- Drive power/mixing tools designed for powders/pastes/ suspensions
- Electric/mechanical components according to ATEX directives
- Shaft seals and mixing drum designed according to process pressure, process temperature and operating conditions
- Liquid addition possibility for water and organic solvents
- Choppers designed for dispersing, crushing and agglomeration
- Heating/cooling jacket (media: water, steam, thermal oil) or electric heating
- Machine components and periphery equipment: heatable dust filter, solvent recovery system



Ploughshare® Mixer for Li-NMC battery pastes

Sizes

Mixer type	Total volume in litres	Working volume in litres
FKM 130 D	130	35 - 95
FKM 300 D	300	75 - 225
FKM 600 D	600	150 - 450
FKM 1200 D	1200	300 - 900
FKM 1600 D	1600	400 - 1200
FKM 2000 D	2000	500 - 1500
FKM 3000 D	3000	750 - 2250
FKM 4200 D	4200	1050 - 3100
FKM 6000 D	6000	1500 - 4500
FKM 8000 D	8000	2000 - 6000
FKM 10000 D	10000	2500 - 7500

Basically, the Lödige Ploughshare® Mixer of type FKM for batch operation has a filling degree of approx. 25 – approx. 75 % of the total volume. The optimal filling degree depends on the application and can therefore vary according to the product mixed.