Capital Markets Day
18 January 2005
A World of Resources.
A Universe of Experience.
Technology Within Your Reach.
AGENDA

- Minerals Industry Overview
- General Company Overview
  - Organization Structure
  - Products / Technologies / Industries / Competitors
- Financial Review
  - Historical Performance
  - 2004 Market Conditions
- Growth Opportunities
23 BILLION T/YEAR OF ROCK CRUSHED

AGGREGATES

FFE Minerals

METALLIC MINERALS

INDUSTRIAL MINERALS

ENERGY MINERALS

27% Sand & Gravel 22% Stone
17% Coal 7% Cement
15% Oil Based 5% Iron Ore
5% Hard Rock Mining 2% Other

Source: Metals Economics Group, 2000
Mining is Capital Expenditure Intensive

Annual Capex of the Mining Industry

Source: CRU Copper Studies, Oct. 2001
**Major Producers**

**Copper, 2002**
Total = 13.5 Mt
- **Codelco**: 15%
- **Others**: 27%
- **Next 5**: 24%
- **Grupo Mexico**: 7%
- **Rio Tinto**: 8%

**Platinum, 2002**
Total = 180 t
- **Impala**: 18%
- **Norilsk**: 15%
- **Lonmin**: 12%
- **Inco**: 3%
- **Next 5**: 9%
- **Others**: 7%
- **Anglo Platinum**: 36%

**Iron ore, 2002**
Total = 1000 Mt
- **CVRD**: 14%
- **Others**: 54%
- **Next 5**: 8%
- **Kumba**: 3%
- **Caemi**: 3%
- **BHP Billiton**: 7%

**Gold, 2002**
Total = 2500 t
- **Anglo Gold Fields**: 7%
- **Next 5**: 14%
- **Barrick**: 7%
- **Rio Tinto**: 4%
- **Others**: 53%
- **Newmont**: 9%

Source: CRU; UBS Warburg
Modern Mining Methods using Large Scale Equipment have Reduced the Necessity for Labor Utilization.

FFE Minerals is highly dependent on Copper Processing for its Minerals Technology Group compared to Al and Fe.

**Segmentation of Processing Requirements of Copper, Aluminum and Iron**

<table>
<thead>
<tr>
<th></th>
<th>% cost of production, 2002</th>
<th>Value US$ B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>Mining &amp; Processing 79%</td>
<td>Smelting 10%</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Bauxite 11%</td>
<td>Alumina 18%</td>
</tr>
<tr>
<td>Iron</td>
<td>Pelletizing 6%</td>
<td>Mining 10%</td>
</tr>
</tbody>
</table>

Source: CVRD; IISI; IBS; USGS; BNDES; IAI; Análises CVRD
Mineral Assets are Principally Distributed in 12 Countries

Country | Type of Mineral/Products | Value of Sales / Year
--- | --- | ---
Brazil | 5 Products | US$5.8Bn/Yr
South Africa | 4 Products | US$5.6Bn/Yr
Chile | 2 Products | US$7.3Bn/Yr
Guinea | 1 Product | US$0.4Bn/Yr
Peru | 3 Products | US$2.3Bn/Yr
Australia | 9 Products | US$21.9Bn/Yr
Canada | 8 Products | US$6.1Bn/Yr
United States | 6 Products | US$8.8Bn/Yr
China | 6 Products | US$14.9Bn/Yr
Russia | 6 Products | US$10.9Bn/Yr
India | 4 Products | US$4.4Bn/Yr
Indonesia | 2 Products | US$2.4Bn/Yr

Geographic Distribution of Minerals

- Nickel
- Zinc
- Copper
- Platinum
- Palladium
- Coal
- Bauxite
- Alumina
- Aluminum
- Chrome
- Iron Ore
- Molybdenite
- Niobium
- Tantalum
Chinese Imports Create a Demand for Minerals and Metals

Chinese Imports of Metal Commodities

Source: Chinese Customs Statistics – UBS Warburg
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WHO IS FFE MINERALS?

• We are a relatively young company, formed in 1996, but with 100 year old roots.
• We are a subsidiary of FLS Industries A/S, Denmark.
• We are worldwide with offices located in Australia, Brazil, Canada, Chile, China, Denmark, India, Mexico, South Africa and the USA.
F - F.L. Smidth
F - Fuller
E - Engineering
MISSION

The purpose of our business is to improve the benefits and quality of solutions for customers who expect break-through technology, quality and services. Our foundation is our technical expertise, integrity, accountability – individually and in teams - and the pursuit of excellence in everything we do. We will produce sufficient financial results to enable profitable growth, creating superior stakeholder value.
VISION

To be the partner of first choice in the Minerals Processing Industry by providing technology based on world-class, engineered solutions and unique performance enhancing services.
FFE MINERALS ORGANIZATION

2004

Turnover - $ 280 M
Employees – 1050
FFE MINERALS

- Significant growth opportunities exist within the minerals industries. The market is HUGE!
- Relationship with FLSmidth can be further leveraged to give FFE Minerals a technical advantage over competitors in certain industries.
- FFE Minerals has been a consistent, profitable and improving performer within the FLSmidth Group since 1997.
- Growth in Minerals is strategic for FLSmidth.
KEY COMPETITORS FOCUS ON PARTS & SERVICE AND INDUSTRY CONSOLIDATION, BUT HAVE DIFFERENT SEGMENT FOCUS

- **Key trends**
  - Competitors are consolidating the industry
  - All main players increasingly focus on the after market

- **Metso**
  - Largest competitor in Metallic Minerals and Aggregates with large focus on Aggregates
  - Present in all product segments
  - Strong after market focus (~40% of sales)
  - Acquisition growth strategy slow due to poor financial results for the Group

- **Sandvik**
  - Among top two competitors in Aggregates, little overlap in Metallic Minerals
  - Products in Material Handling and Crushing
  - Strong after market focus (35–40%) of sales
  - Aggressive acquisition based growth strategy focussing on after market businesses

- **Outokumpu**
  - Top player in Metallic Separation and Pyroprocessing
  - High focus on Metallic Processing plants
  - Acquisition based growth into new market segments (Lurgi Metallurgie, Nordberg grinding mills, Supaflow water treatment)

- **GL&V**
  - Strong player in Metallic Separation and Dewatering
  - High focus on Aftermarket Parts
  - Acquisition based growth focused on Consolidation (Dorr Oliver, Eimco)
A World of Resources.
A Universe of Experience.
FFE MINERALS

FOUR MAIN OPERATING GROUPS:

- MINERALS TECHNOLOGY GROUP
- PYRO TECHNOLOGY GROUP
- MATERIALS HANDLING GROUP
- SERVICE TECHNOLOGY GROUP
COLD AND HOT HAVE VERY DIFFERENT CHARACTERISTICS, AND THE LARGE, ATTRACTIVE PARTS & SERVICE MARKET IS MORE CLOSELY LINKED TO COLD THAN TO HOT

**Cold**
- More standardized product range
- Process knowledge an advantage
- Parts intensive
- Large variation in order size and frequency
- Equipment warranty required
- Quoted/sold as separate components
- Dominated by Metso, FFEM and Outokumpu

**Hot**
- High degree of engineering input/laboratory testing
- High degree of process knowledge a “must”
- Parts consumption lower
- Large, higher margin orders with less frequency
- Process performance, environmental compliance and equipment warranty needed
- Turn-key often required
- Niches controlled by smaller players

**Parts & Service**
- Parts regularly replaced
- On-site maintenance conducted in-house (potentially outsourced)
- End-user direct business
- Low degree of eng. input
- Smaller orders/higher margins
- Responsiveness is key
- Retrofit at long intervals
- Strong competition from independent service providers (e.g. for plant audits)

Market potential:
- Cold: 2,500–3000 USD millions
- Hot: ~1000 USD millions
- Parts & Service: 7,000–10,000 USD millions
MINERALS TECHNOLOGY GROUP

Provides crushing, grinding, hoisting and separation equipment for the minerals industry.
We provide processes and systems which include primary crushing plants, milling systems, and wet or dry classification systems for all minerals, including iron, gold, copper, nickel, lead, zinc and coal.

**STRONG PRODUCT RANGE**

**Crushing**
- Primary gyratory and jaw crushers
- Impact crushers and hammer mills
- Low-speed sizers

**Grinding**
- Autogenous and semi-autogenous mills
- Ball mills
- Rod mills
- Rotary scrubbers
- Pebble mills
- Roller mills

**Separation Technology**
- Flotation cells
- Hydrocyclones
- Tecgnequip valves
- High efficiency O-Sepa® dry classifiers

**Mine Hoists**
- FFEM-Vecor wirewinders

We are not new to the industry.
THE MINING PROCESS FOR MOST HARD ROCKS (I.E., COPPER, GOLD, PLATINUM,...)

1.2-1.5 M

~200 mm

CRUSHER

~200 mm

SAG MILL

6-10 mm

BALL MILL

6-10 mm

0.075 mm
TOTAL CRUSHING EXPERIENCE

- PRIMARY GYRATORY CRUSHERS 391
- PRIMARY DOUBLE TOGGLE JAWS 520
- PRIMARY SINGLE TOGGLE JAWS 15
- SECONDARY GYRATORY CRUSHERS 145
- TERTIARY CRUSHERS 310

TOTAL CRUSHERS 1,381
Primary Gyratory Crushers

• Manufacturer of Gyratory Crushers Since 1904
ABON Sizer
TOTAL MILLING EXPERIENCE

- TRUNNION SUPPORTED BALL & ROD MILLS 2,260
- SHELL SUPPORTED BALL MILLS 123
- TRUNNION SUPPORTED SAG MILLS 121
- SHELL SUPPORTED SAG MILLS 21
- SHELL SUPPORTED SCRUBBERS 15

TOTAL MILLS 2,540
SAG & BALL MILLS

- THESE MILLS RANGE IN SIZE FROM 10’ DIAMETER TO 38’ DIAMETER

- THE PURPOSE OF THE MILLS IS TO FURTHER GRIND THE ROCK TO .075mm
SAG/BALL MILL SHELLS

BALL MILL SHELLS BEING TRANSPORTED TO THE ANTAMINA JOBSITE IN PERU
ANTAMINA, PERU (Copper/Zinc)
- 1 x 38' x 21' SAG Mill @ 27,000 HP
- 3 x 24' x 36' Ball Mill @ 15,000 HP
- 26' Hydrocyclones
- 1 x 60” x 89” Primary Gyratory

ESCONDIDA, CHILE (Copper)
- 1 x 38’ x 22.5’ SAG Mill @ 26,600 HP
- 3 x 25’ x 40’ Ball Mill @ 18,000 HP
- 1 x 60” x 110” Primary Gyatory
Escondida Phase IV 38’ SAG Mill, Chile
PYRO TECHNOLOGY GROUP

Provides process expertise, equipment and systems to the metallurgical and minerals industries.
We provide total pyrometallurgical solutions from R&D through to erection and commissioning for alumina and bauxite, lime, pulp and paper and the metalliferous industries.

**Calcination**
- Fluid beds
- Rotary kilns
- Gas suspension

**Drying/Preheating/Cooling**
- Rotary
- Flash
- Fluid beds
- Stone preheaters
- Grate
- SF cross bar
- Compax

**Specialist Equipment**
- Coke oven batteries
- Slakers / hydrators
- Pierce Smith convertors
- Hydrate coolers
- Ladles
- Combustion systems

Alcoa Liquor burning kiln
THERMAL PROCESSING OF MINERALS
(PHOSPHATES, SODA ASH, FERRO NICKEL, LIGHTWEIGHT AGGREGATE, LIMESTONE)

FEED
CaCO₃
(1/2”-2”LIMESTONE)

GASES
CO₂

PREHEATER

KILN

DUST COLLECTOR

FUEL

PRODUCT
CaO
(LIME)

• STEEL
• FGD SYSTEMS
• AG-NEUTRALIZER
• PAPER BRIGHTENER
KILNS

RANGE IN SIZE FROM 4 - 6 m DIAMETER AND 33 TO 130 m LONG!
MATERIALS HANDLING GROUP

Provides technology for the mechanical and pneumatic handling of minerals. The Materials Handling Group will service industries already served by FFEM’s proprietary technologies.
We provide processes and systems which transport a variety of materials, and in some cases reduce the size of the materials, through integration of FLS / FFEM materials handling and comminution technologies.

**Crushing Systems**
- Feeder / breakers
- Feeder / sizers
- Feeder / crushers

**Mechanical Handling**
- ConveyorKIT pipe conveyors
- Traditional belt conveyors
- ABON roller screens
- Stackers / reclaimers
- ABON and Buffalo flight bar feeders
- Apron feeders

**Pneumatic Handling**
- Turbuflow conveying pipe
- Airlifts
- Alumina handling
- Alumina direct pot feeding
- Fly ash handling
- Storage silos
Materials Handling – Stackers, Reclaimers, Spreaders

• FLS Group Experience

1161 Machines sold as of the end of 2004
Materials Handling – Apron Feeders

• Manufacturer of Apron Feeders since 1940

• 148 Conventional Units Sold as of December 2003

• Completed product development of a tractor component type Apron Feeder in 2003

• 5 Tractor Units Sold in 2004
FFE Minerals is currently supplying the world’s longest pipe conveyor at 5 km long.
SERVICE TECHNOLOGY GROUP

Provides maintenance, process, training, analytical, construction, breakdown, troubleshooting and replacement part support for the entire lifecycle of our equipment.
Service Technology Group

We provide total service, maintenance, asset management and operational services to the minerals and metalliferous industries.

Products
- Original OEM spares
- Product review and improvement
- Life cycle analysis
- Repair
- Retrofits

Engineering Services
- Equipment audits
- Process audits
- Testing
- Erection supervision
- Training

Operations and Maintenance
- Mill management
- Plant maintenance
- Asset management
- Plant operations

STRONG PRODUCT RANGE
Technology Within Your Reach.
CVRD-BRAZIL
GYRATORY CRusher
ORAPA-BOTSWANA
13’ DIAMETER SCRUBBERS
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<td><strong>ORDER INTAKE:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SALES</td>
<td>130.4</td>
<td>157.5</td>
<td>158.3</td>
<td>150.5</td>
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<td>CM</td>
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<td>34.3</td>
<td>37.2</td>
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<td><strong>P&amp;L HIGHLIGHTS:</strong></td>
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<tr>
<td>REVENUE</td>
<td>152.5</td>
<td>131.2</td>
<td>158.7</td>
<td>135.1</td>
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<tr>
<td>EBIT</td>
<td>3.2</td>
<td>3.9</td>
<td>5.4</td>
<td>7.0</td>
<td>7.9</td>
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<tr>
<td>EBT</td>
<td>4.3</td>
<td>4.8</td>
<td>6.5</td>
<td>7.6</td>
<td>8.2</td>
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<tr>
<td>NET PROFIT</td>
<td>2.5</td>
<td>3.7</td>
<td>4.5</td>
<td>5.3</td>
<td>5.6</td>
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<tr>
<td>EVA</td>
<td>1.3</td>
<td>2.3</td>
<td>2.5</td>
<td>4.1</td>
<td>4.6</td>
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<tr>
<td>ROCE</td>
<td>12.3%</td>
<td>15.8%</td>
<td>16.6%</td>
<td>21.4%</td>
<td>20.7%</td>
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<tr>
<td>EMPLOYEES</td>
<td>582</td>
<td>624</td>
<td>674</td>
<td>685</td>
<td>744</td>
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</tbody>
</table>
HISTORICAL ORDER INTAKE ANALYSIS

US$'s Millions


SALES
CONTRIBUTION MARGIN
FINANCIAL REVIEW

- Business Conditions
- Goals
- Order Intake
- Profitability
  - Net Sales
  - Contribution Margin
  - EBITA / EBIT / EBT
- Order Execution
Metals Prices are Strong and Expected to Remain So

- Copper Prices – Highest Avg. Price in 15 Years
- Gold Price – Up 50% Since Jan 2002
- Platinum Price – Up 70% Since Jan 2002
- Nickel Price – Highest in 16 Years
- “Mega-Project” Activity Picking Up

US$ Devaluation Harming Producer Profits

- Particularly the Case for South African Platinum and Gold Producers
Indian Economy / Market Very Active

Pulp & Paper Market Mixed
- Far East / Europe – OK
- Brazil Wave is Ended

Alumina Market to be Active for Next Two Years
- China, India, West Africa, Brazil
ORDER INTAKE – 2004

- **Very** Strong Performance In 2004
  - All Business Areas (MTG, PTG, MHG, STG) Are Out-Performing Internal Targets and Historical Averages

- Market Conditions / Indicators Positive

- India Market is Booming
  - Well Positioned on Several Major Orders

- But....
But....
- Steel Prices are High
- Energy Costs are High / Volatile
- ZAR / USD Rate is High
- Possible Copper Royalty in Chile and Peru

Above Factors Have Delayed Projects

In Spite of the Delays We Are Bullish for 2005 Order Intake

What Have We Learned?
- There is No Substitute For Experience
- Experience in Cement Is Good, But Is Not Enough
- Quality of FFEM Technical Personnel is Being Upgraded
  - Balance Cost Control w/ Risk Management
  - Enlist the Assistance of Outside Experts When Available

All Mechanical and Process “Fixes” Have Been Incorporated on New Projects
- ISO 9001-2000 System Works
  - Document Non-Conformance
  - Correct the Problem
  - Implement Preventative Action
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HOW WILL FFEM GROW?

- Continue the focus on growth in parts & services
- Integrate newly “acquired” technology to expand FFEM product offerings (i.e. materials handling)
- Continue to seek growth through alliances with suitable and strategically aligned partners
- Internal Developments – R&D
- Acquisitions
2005 GOALS

- Grow Business While Maintaining Control
  - Markets are Very Active in Most Segments
  - Take Advantage of Active Markets
  - But, Understand and Acknowledge our Limitations

- Continue to Improve Profitability as % of Sales
  - Increase Sales at ABON, Buffalo and Technequip on a Worldwide Basis
  - Surpass STG Bookings and Profitability
  - Continued Success in PTG (Close Projects)
  - Improve CM’s in MTG
2005 GOALS

- Integrate New Technologies into FFE Minerals
  - FLS Material Handling
  - Möller Materials Handling
  - ConveyorKIT Pipe Conveyor

- Expand from Equipment Supplier to System Supplier / Solution Provider
  - Requires Investment in Technical Resources

- Carefully Expand the Service Contracts
CURRENT R&D PROJECT
FLOTATION DEVELOPMENT

- Follows Crushing and Milling in Mining Circuit
  - Completes FFEM Concentrator Plant Offering
- Same Customers / Same Sales Process
- This Is Where The Value Is Added
  - Very Process Oriented
  - Better Recovery / Lower Energy Consumption
- Prototype Units Currently in Operation
  - South Africa – Platinum
  - Chile – Copper
- First Purchase Orders Received in Late 2004
TYPICAL SULPHIDE ORE TREATMENT CIRCUIT

PRIMARY CRUSHING

SAG MILLING

CYCLONES

BALL MILLING

FLOTATION

FINAL CONCENTRATE TO SMELTER

TAILINGS THICKENER WATER RECOVERY
CONCENTRATOR LOOKING EAST
LOOKING NORTH AT GRINDING AREA
Cu AND Zn FLOTATION AREAS
ACQUISITION PROSPECTS IMMEDIATE

- Small to medium-sized regional companies
- Specialized “bolt-on” technology
- Parts & service intensive
- Leverage worldwide FFEM Group
<table>
<thead>
<tr>
<th>Year</th>
<th>Company</th>
<th>Location</th>
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<tbody>
<tr>
<td>1993</td>
<td>Technequip</td>
<td>Canada</td>
</tr>
<tr>
<td>1997</td>
<td>FFEM-Vecor</td>
<td>South Africa</td>
</tr>
<tr>
<td>1998</td>
<td>ABON</td>
<td>Australia</td>
</tr>
<tr>
<td>1999</td>
<td>FFEM-Buffalo</td>
<td>South Africa</td>
</tr>
<tr>
<td>2003</td>
<td>ConveyorKit</td>
<td>South Africa</td>
</tr>
</tbody>
</table>
ACQUISITION PROSPECTS
FUTURE

- Downstream Equipment Supplier (flotation/thickening)
- Expansion of Pyro Capabilities
- Expansion Further into Aggregates Equipment?
SUMMARY
1995-2004 Achievements / Improvements

• Established Global Presence / Grew Market Share
  Chile South Africa
  Australia Brazil
  India

• Acquired Technology
  Hydrocyclones
  Minerals Sizers
  Feeder Breakers
  Pipe Conveyors

• Standardized FFEM Procedures Globally

• Globalized a Direct Sales & Service Presence into Three Divisions, Now Expanding to Four
FFE Minerals Building Blocks

• Growing Annual Revenue
  – Heritage Brand Names & Trademarks
  – Global Reach & Opportunity
  – Current Strong Market Segments

• Product & Process Expertise
  – Strong Product / Application Resources & Data
  – Balance of Legacy & New Technology
  – Building Specific Process Expertise

• Organization
  – Global Capabilities / Mining Specific
  – Growing with Volume
  – Committed, Knowledgeable & Capable – “Can Do Spirit”
Summary

• Minerals markets are currently strong, led by the growth of the developing countries

• FFE Minerals Positioning:
  – Heritage brand names, niche products in crushing and milling
  – Developed consistently profitable Pyro-metallurgical business
  – Have grown the high margin/low risk Parts & Service business into a strong profit earner
  – Expanding into downstream processing with the new flotation products
  – Expanding into Material Handling with the expertise and technology of FLSmidth
  – Have multiple platforms to accelerate growth
THANK YOU

QUESTIONS?