



Caterpillar HMS Dortmund

**Logistische Herausforderungen des Transports von Großhydraulikbaggern
nach und in Afrika**

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WHEREVER THERE'S MINING



Forward Looking Statement

Statements on this website and in the accompanying materials relate to future events and expectations and are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are subject to known and unknown factors that may cause Caterpillar's actual results to be different from those expressed or implied in the forward-looking statements. Words such as "believe," "estimate," "will be," "will," "would," "expect," "anticipate," "plan," "project," "intend," "could," "should" or other similar words or expressions often identify forward-looking statements. All statements other than statements of historical fact are forward-looking statements, including, without limitation, statements regarding our outlook, projections, forecasts or trend descriptions. These statements do not guarantee future performance, and Caterpillar does not undertake to update its forward-looking statements.

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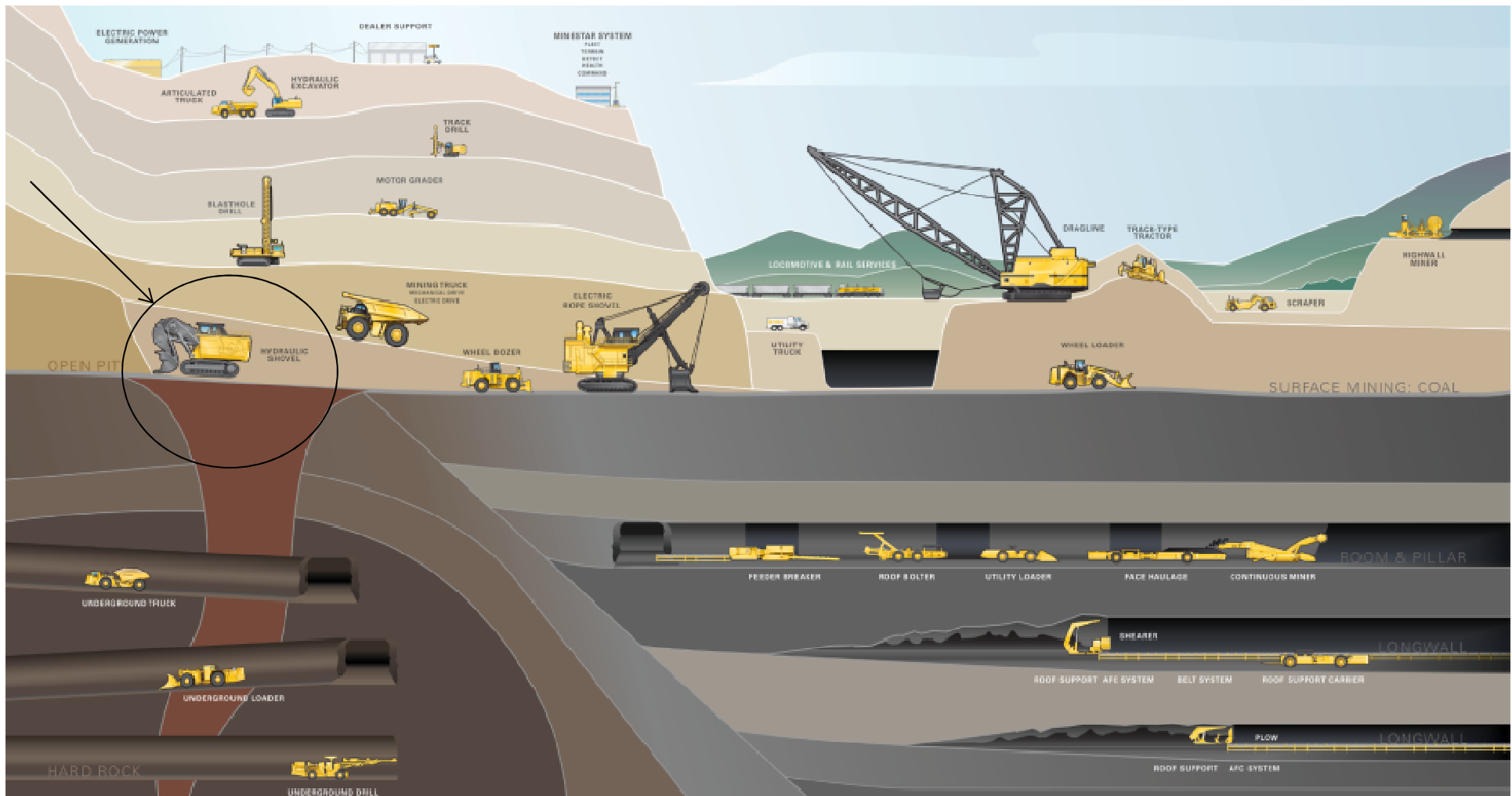
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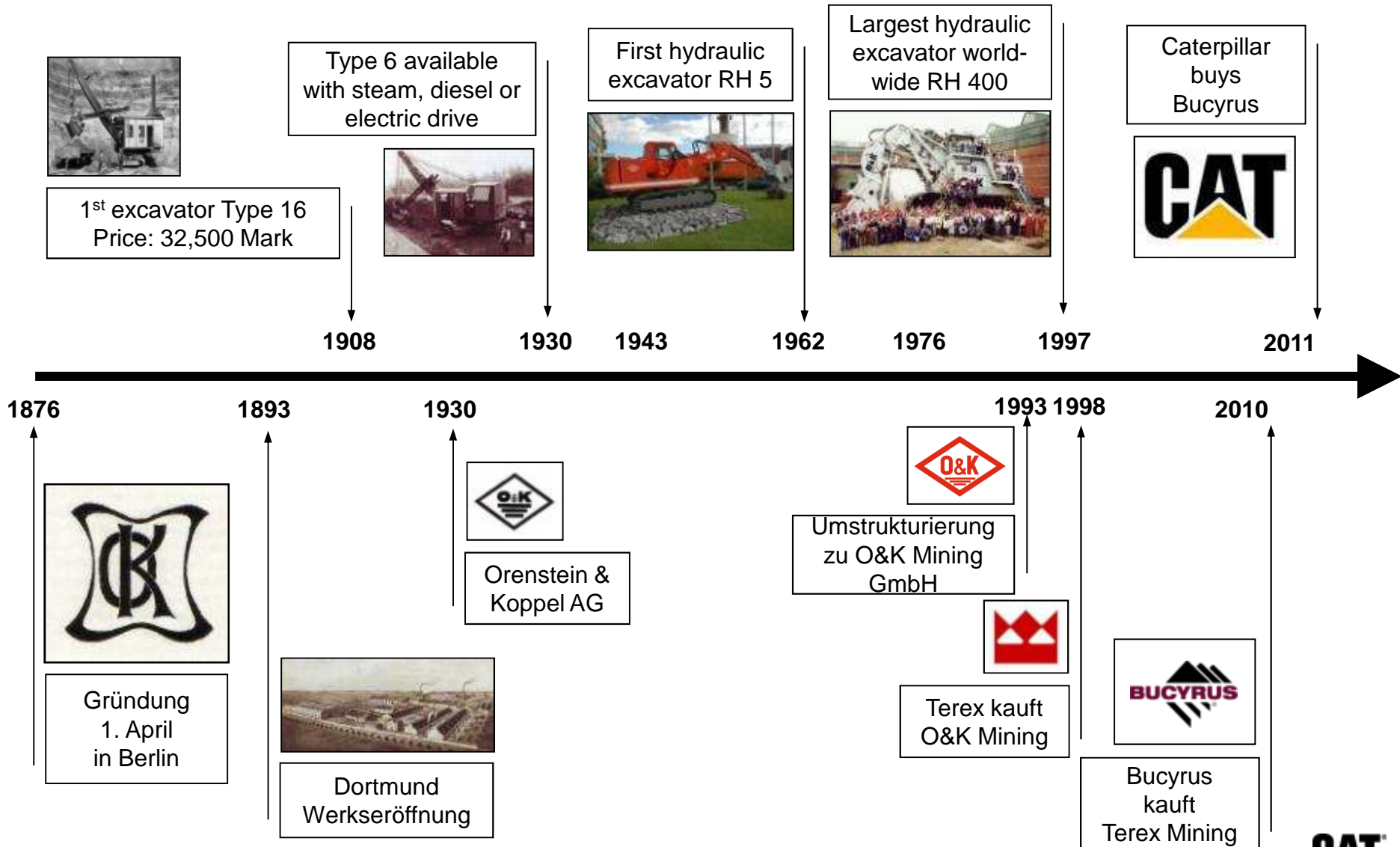
1. Caterpillar HMS in Dortmund – Geschichte



Caterpillar Produktpalette (Über- u. Untertagebergbau)



Von Orenstein & Koppel bis Caterpillar



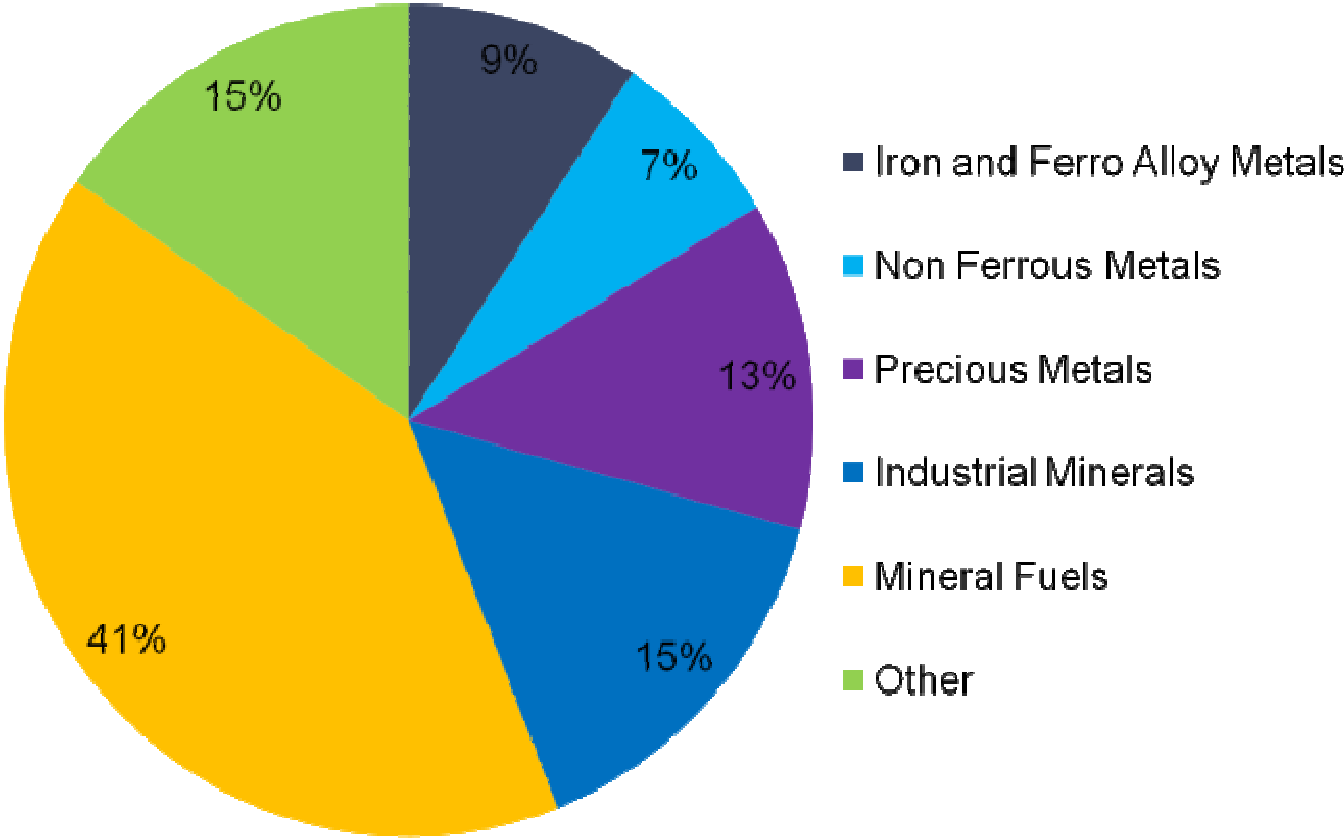
Caterpillar HMS

Werk Dortmund für Großhydraulikbagger

- Gesamtfläche: 76,200 m²
- Hallenfläche: 33,500 m²
- Mitarbeiter Sept 11: ca. 700



CAT[®] Hydraulic Shovels Sold/Commodity



2. Caterpillar HMS Produktpalette

Übersicht Produktpalette

VERSATILITY CLASS

6015/6015 FS
RH40E

106 t / 105 t
477 / 522 kW
7.0 m³ / 7.0 m³



6018/6018 FS
RH90C

181 t / 177 t
858 kW
10.0 m³ / 10.0 m³



PRODUCTIVITY CLASS

6030/6030 FS
RH120E

290 t / 287 t
1008 / 1140 kW
17.0 m³ / 16.5 m³



6040/6040 FS
RH170B

397 t / 397 t
1492 / 1516 kW
22.0 m³ / 22.0 m³



6050/6050 FS
RH200

534 t / 525 t
1880 kW
28.0 m³ / 26.0 m³



6060/6060 FS
RH340B

565 t / 562 t
2240 kW
34.0 m³ / 34.0 m³



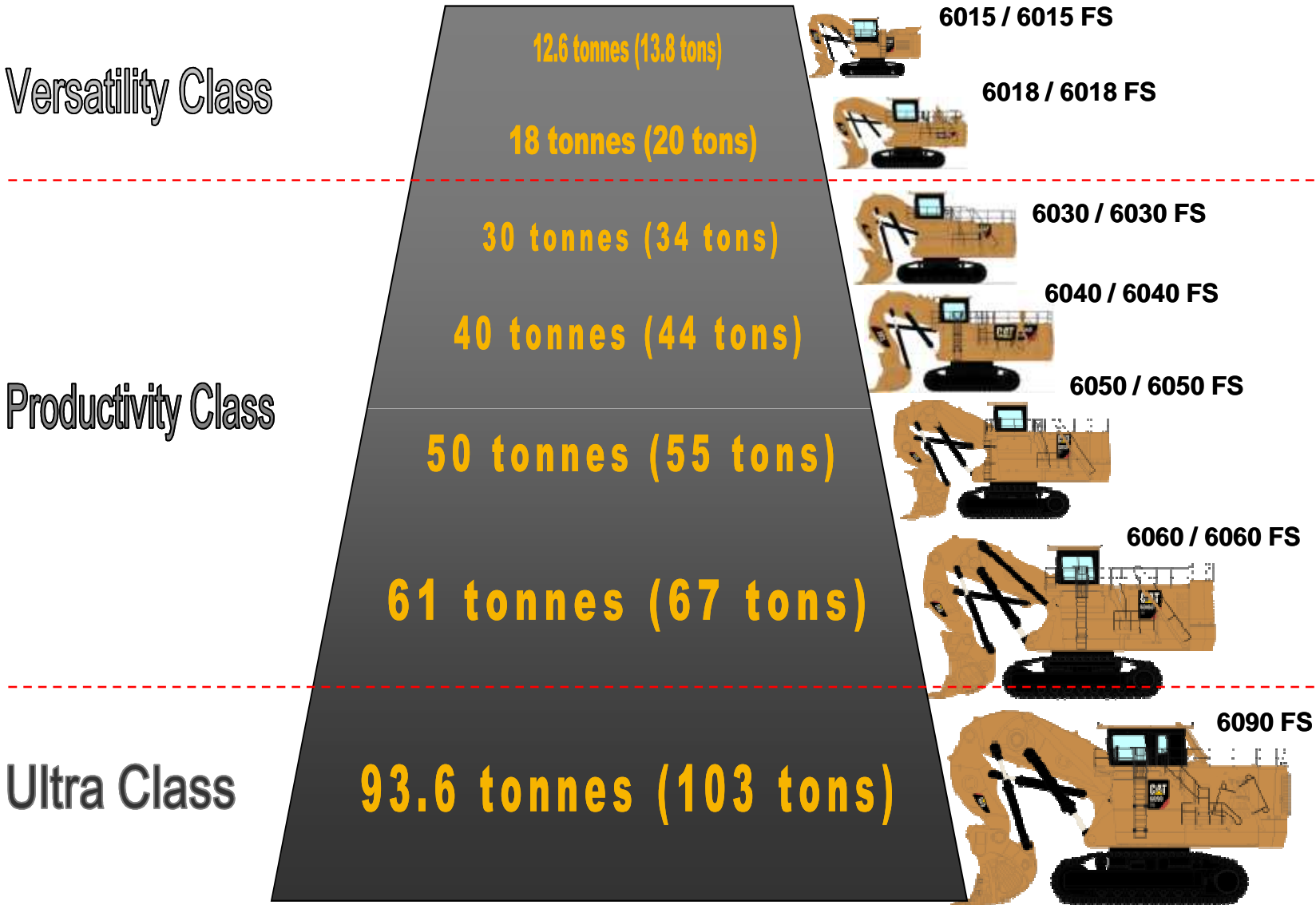
ULTRA CLASS

6090 FS
RH400

1000 t-class
3360 kW
52.0 m³



Einteilung Produktpalette

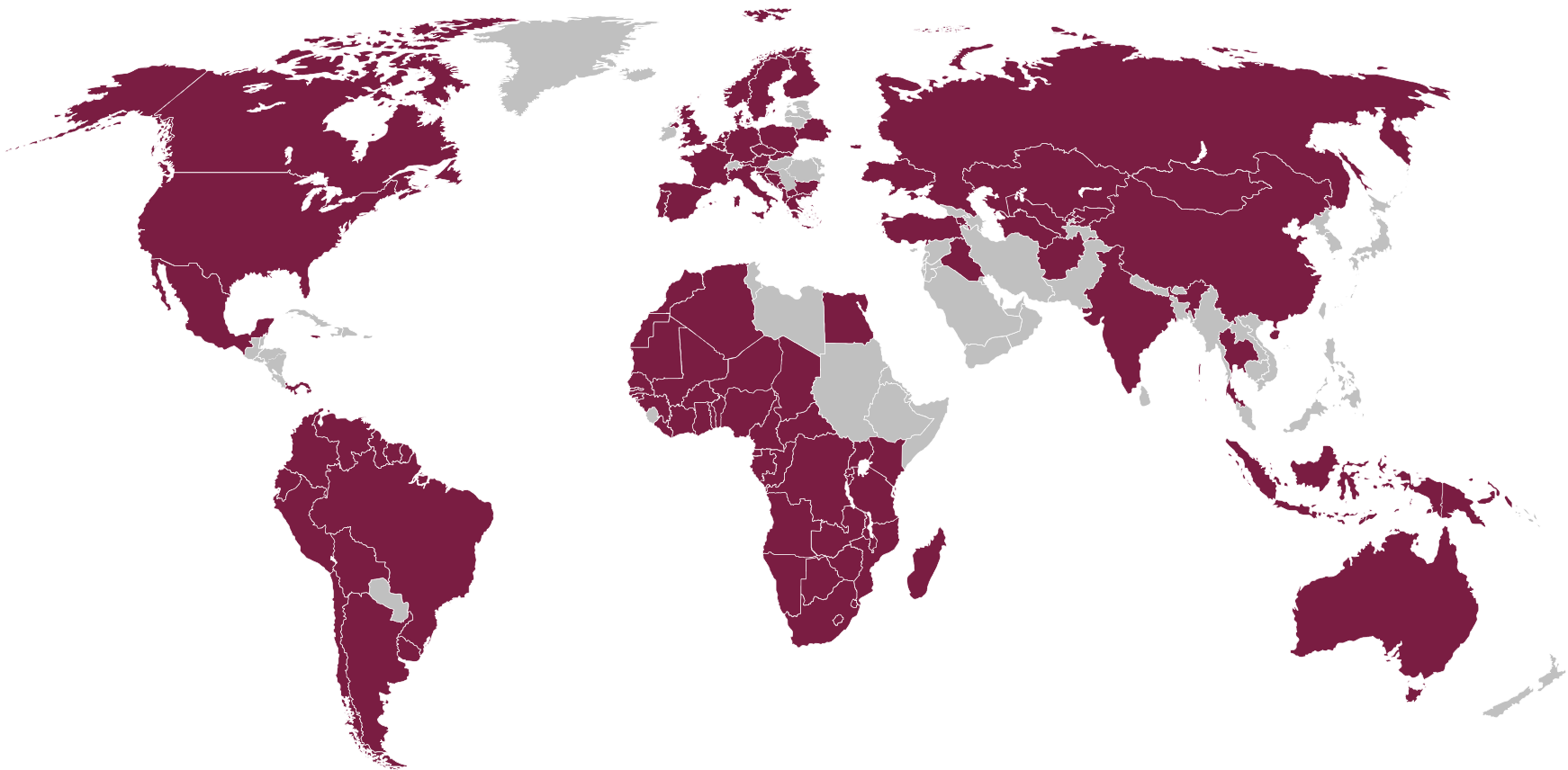


1997: größter Hydraulikbagger der Welt 1.000 t Dienstgewicht



3. Die Bedeutung des afrikanischen Marktes für Caterpillar HMS

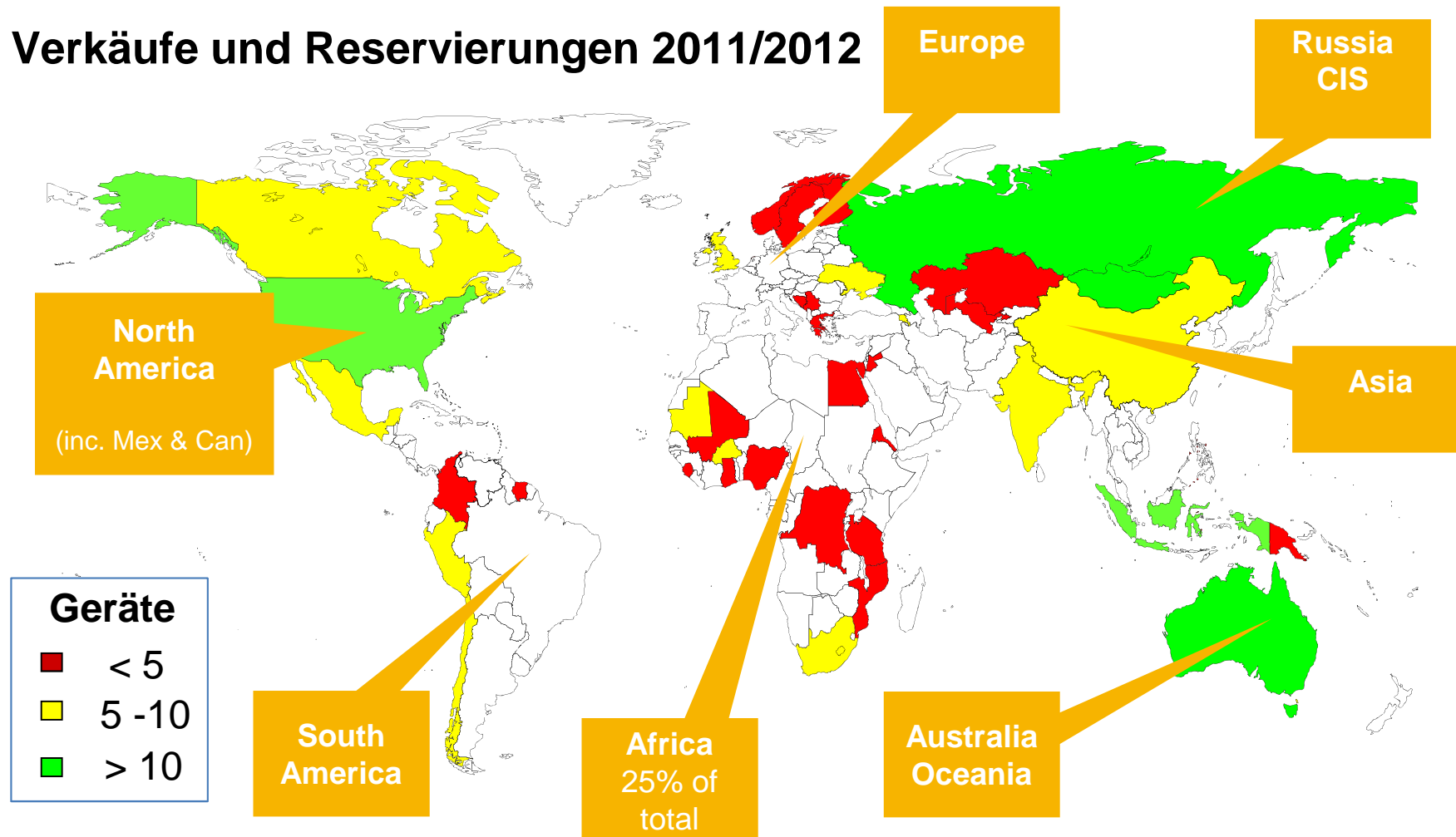
Population Global



All around the world – just around the corner

Marktübersicht – Ausschau 2012

Verkäufe und Reservierungen 2011/2012



Vorschau bis 2017: 25% + der Produktion für den afrikanischen Markt

Source: Bookings and Reservations 2011/2012 status December 2011



4. Transport nach Afrika

4.1 Produktbesonderheiten

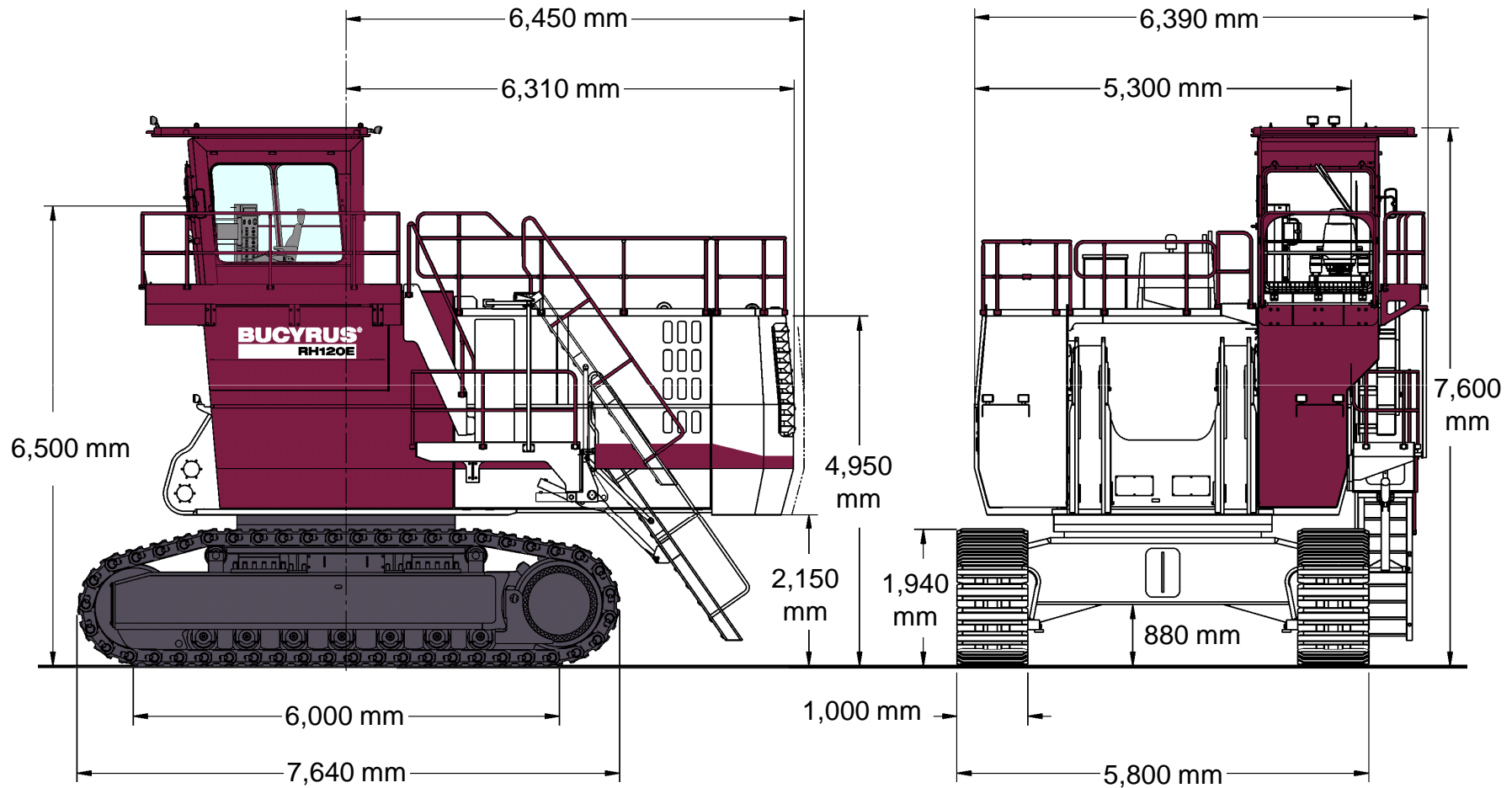
4.2 Vorlauf

4.3 Umschlag und Verschiffung

4.4 Nachlauf

Produktbesonderheiten

- Geräteabmessungen (CAT 6030) -



Vortransport

Transport der gängigsten Modelle:

- 14 Schwertransporte (plus 8 – 12 zusätzl. Lieferungen Zubehör)
- Transportgenehmigungen
- Polizeieskorte

=> Zusammenarbeit lediglich mit Spezialisten (Rahmenvereinbarung)



Umschlag / Verschiffung nach Afrika

- ca. 90% der Geräte durch CAT Dortmund oder CAT Logistik (CFR/DDU)
- Wichtigste Destinationen: Mauretania, Senegal, Ghana, Kenia, Südafrika
- Schwierigkeiten:
 - Unregelmäßige/seltene Verschiffungsmöglichkeiten
 - Route / Verschiffungsdauer
 - Ro/Ro selten



Luftfracht: keine oder teure Sonderoptionen



Nachlauf

Die Organisation des Nachlaufs in Afrika ist DIE Herausforderung:

- Fehlende Infrastruktur in afrikanischen Häfen (unzureichende Krankapazitäten)
- Straßennetz unzureichend oder nicht vorhanden
- Hindernisse (Brücken, ...)
- Mangel an erfahrenen Spediteuren vor Ort und/oder unzureichender Fuhrpark
- Inlandtransport über mehrere Länder (Zoll, Papiere ..)

Nachlauf - Beispiel

„LKW-Entführung“ in Nigeria



Nachlauf Beispiel

Der größte Tieflader in
Eritrea !

3,35 m Breite
9,0 m Länge



Nachlauf – Beispiel

Best ausgerüsteter Spediteur in Eritrea!



Nachlauf Beispiel : Flussüberquerung im Kongo



Häufig tragen vorhandene Brücken Minimallasten nicht, oder sind nicht vorhanden, so dass Sondermaßnahmen eingeleitet werden müssen: Bau von Behelfsbrücken; komplizierte Demontage von Gerätemodulen ...

5. Entwicklung des Marktes und Fazit

Marktentwicklung und Fazit

Steigender Bedarf an Rohstoffen und steigende Rohstoffpreise

=> Abbau auch in politisch und geografisch/logistisch schwierigen Ländern

=> Große, internationale Firmen zunehmend in Afrika vertreten (Arcelor Mittal Steel, Rio Tinto, Vale ...)

⇒ Erfolgreiche Arbeit nur in enger Kooperation mit starken lokalen Partner möglich:

⇒ Spediteuren

⇒ Kunden

⇒ Händlern