

LIMA Programme 2023

Overview of Engineering Wordings

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NOT IF, BUT HOW



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Overview of
Policies

02

Construction and
Erection phase
Policies

03

Construction
Machinery

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Operation phase
policies

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Overview of engineering wordings

01





General

- Mainly All Risk / some Named Perils policies
- Wide range of risks
- Indemnity for sudden and unforeseen physical loss
- Project (Construction / Erection) and Operation
- Various versions

Standard
Policies
(Munich Re)

Broker
Manuscript
wordings

Introduction to engineering wordings

Munich Re wordings

CEAR – Construction and Erection All Risk Policy

Construction and Erection All Risk Policy
Policy No. Enter policy number.

Version 1.1

Status: July 2015

This *Policy* is effected between

1. Enter the name of the insured,
hereinafter the *Insured*.

- Focus - Munich Re wordings
- Applicability- Several lines engineering disciplines
- Munich Re wordings are well known/markets
- Standard cover or tailormade amendments possible
- Classic wordings and more modern wordings are available

General

Structure of Policies

Insuring Agreement	Definitions applicable to all sections Exclusions applicable to all sections Conditions applicable to all sections
Section 1a MD	Project works Cover for any sudden physical loss to the property insured within the territorial limits and within the period of insurance
Section 1b CPM	Plant, Machinery and Equipment Cover for any sudden physical loss to the property insured within the territorial limits and within the period of insurance
Section 2 TPL	Third Party Liability Cover when legally liable for accidental death / bodily injury or accidental loss or damage to property of third parties within the territorial limits and within the period of insurance
Section 3 DSU	Delay in Start-up Cover for loss of the interest insured (gross of profit, increased costs of work or standing charges, increased cost of working up to the indemnity period insured..
Section 4 MC	Marine Cargo(under CPI wording) Cover for loss or damage to property insured (Section 1a & 1b) during freight or carriage subject to the Institute Cargo Clauses specified.

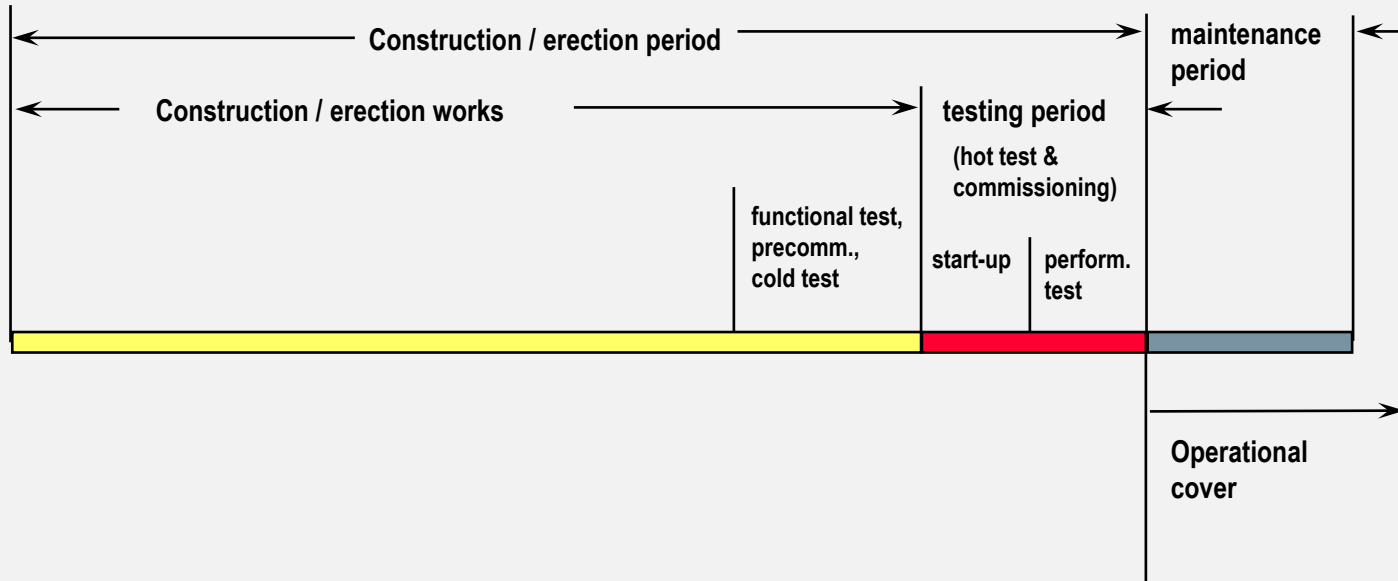


Insurance Cover:

- Multiline – Engineering, Marine, Liability
- Tailor-made insurance solution - Adaptable to the needs of all parties
- Standardised wordings and endorsements
- Multiyear - For the entire Project life cycle
- Multiple Insured's - all parties involved in the execution of the project
- All risk and full reinstatement

Engineering Policies

Period of Insurance





Engineering Insurance Policies

- Construction/erection phase policies
- Construction equipment policy
- Operation phase policies
- Special covers

Construction & erection phase policies

02



Construction/Erection Policies

Type of policy

EAR / CAR / CEAR / CPI Material Damage	TPL	AloP / DSU
All risk cover NatCat Human failure Technical failure	Coverage against property damage of third parties and/or bodily injury/death of third parties for which the Insured is (legally) liable.	Cover loss of gross profit/standing charges and specific additional expenses (ICoW) that result form a delay in the completion of a construction/erection project

Standard endorsements to the policy:

- Extensions of cover
- Warranties
- Restrictions of cover

Cover for construction or erection (Project)



CAR – Contractors all Risk

- Infrastructure projects (tunnels, roads, bridges)
- Building complexes
- Hydropower projects
- Marine Structures

EAR – Erection All Risk

- Industrial complexes
- Refineries
- Power plants
- Steel mills
- Cement factories



CEAR Construction & Erection All Risk

Combines EAR
and CAR policy
into one policy

CPI
Comprehensive
Project Insurance
CEAR
+ Marine cover
into one policy

Construction Policies

- All Risk Policies
- Property Damage
- Third Party Liability
- Advanced Loss of Profit

Mixed projects

If both CAR and EAR works are involved

CAR / EAR Mixed Projects

100% CAR	80% CAR	50% CAR	20% CAR	100% EAR
	20% EAR	50% EAR	80% EAR	
CAR - Rate	CAR - Rate	CAR / EAR – Rate Combined	EAR - Rate	EAR - Rate
CAR Policy		CAR / EAR Policy	EAR Policy	

CAR

- Civil eng. projects/units mainly constructed on site
 - Material mainly concrete, stone, sand
 - Manufacturer's risk with the contractor
 - Low concentration of value
 - No/less items to test
-
- NB: Many projects nowadays are becoming complex and involve a mix of both erection and construction

EAR

- Machinery/equipment manufactured in factory and assembled on site
- Mainly steel, metal
- Manufacturer's risk with the producer (manufacturer)
- High concentration of value
- Test important, high risk



Dam project



Image: dpa Picture Alliance



Erection of a Turbo Set



Erection of a Cement Plant



Cement Plant

Projects covered by CAR Insurance

- Infrastructure & Transport Projects; Roads, Railway Lines, Airports, Tunnels
- Hydropower projects (NB BoV of plant is important)
- Water-pipelines (concrete), Sewer Lines, Irrigation Systems, Canals
- Buildings (residential, industrial, office, halls, stadiums)
- Dams
- Towers, Chimneys, Silos
- Breakwaters, Harbours, ports, Jetties, River Control Works

NB- Largely Civil Works form major part

Projects covered by EAR Insurance

Provide broad insurance coverage during construction and erection of machinery, plant and steel structures involving little civil engineering work.

- Refineries and other Petrochemical plants
- Power plants - Turbine/Generator-sets
- Cement factories
- Sugar industries
- Paper production plants
- Transportation and traffic systems
- Electrical industry
- Metal production and metal working industry
- Other Industrial complexes

Construction Plant & Machinery (CPM) Insurance

03



Contractors items needed to facilitate execution of EAR / CAR projects

Construction machinery

Construction items that are movable and have moving working parts which are operated under the control of an operator

Plant & Equipment

All items that are usually fixed used by the Contractor

Cranes

Cranes

Excavators

Grader and Bulldozer

Tunnel Boring Machines (TBM)

Batching plant

Types of CPM – General classification

Group 1

- Cranes & Lifting Equipment

Group 2

- Earthmoving Equipment
- Mobile Concrete equipment
- Construction and transportation vehicles and plant
- Drilling, tunnelling and piling machinery

Group 3

- Slow-moving or temporary stationary equipment:

Insurance of contractors' plant and machinery

- Whilst at the location or in the geographic area agreed (Limited to a specific site) .
- All risk cover - any unforeseen and sudden physical loss or damage from any cause not specifically excluded
- Any loss or damage occurring at work or at rest
- Being dismantled for cleaning and overhauling or in the course of the aforesaid operations themselves
- In the course of subsequent re-erection, but in any case only after successful commissioning
- Exclusion of electrical and mechanical breakdown - but resulting damage is covered
- Basis of loss settlement is the Actual Value of the plant and equipment.

Operational phase policies

04



Cover for operations of plants

M (MB) – Machinery Breakdown



- Cover for major machinery (e.g. in power plants and cement plants)
- Cover for damage from causes as e.g. defects in material, faulty design
- Combination with fire policy

CMI – Comprehensive Machinery Insurance



- Cover for plants with MB as main exposure (e.g. in power plants)
- All Risk cover (fire, NatCat, machinery breakdown)

MB + MLoP

All Risks are covered **which are not specifically excluded**

- **FLEXA** – Fire, Lightning, Explosion, Aircraft impact excluded

IAR+MB

All Risks are covered **which are not specifically excluded**

- **IAR** (incl BI/LOP)
- **Mech. + Elect Breakdown** excluded MB endorsement required for adequate coverage

CMI

All Risks are covered **which are not specifically excluded**

- **FLEXA** – Fire, Lightning, Explosion, Aircraft impact included
- **NatCat** – Earthquake, Flood, Inundation, Subsidence, Landslide, Avalanche, Hurricane, Cyclone, Volcanic Eruption or similar natural catastrophes included

Insuring agreement

Definitions applicable to all sections
Exclusions applicable to all sections
Conditions applicable to all sections

Section 1

Operational material
damage

Section 2

Operational business
interruption

Section 1 – Operational Material Damage

- All risk cover - any unforeseen and sudden physical loss or damage from any cause not specifically excluded
- Exclusions (not complete):
 - Loss or damage for which a manufacturer, supplier, contractor or repairer is responsible
 - Wear and tear, rust, corrosion, erosion, cavitation, boiler scale, incrustation, deterioration, settling, gradual cracking....
 - Any malfunction of hardware, software or embedded chips
 - Costs of maintenance, upgrade or improvement, normal upkeep;
 - Losses due to a defect, error or omission in design, plan, specification, material, manufacture or workmanship but the resulting loss is covered
- Basis of loss settlement is Actual Value of the property

Section 2 - Business Interruption

- Indemnification for financial consequences of a Material Damage
- Indemnity in respect of
 - Gross profit, or
 - Specified **standing charges**
.....resulting from a reduction in **turnover**.



Hydropower plants (Machinery part)

Comprehensive Machinery Insurance

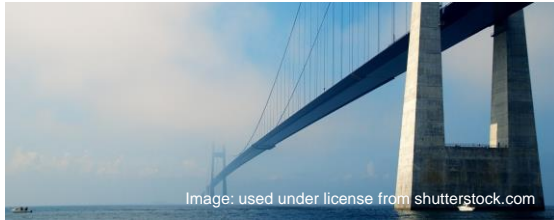
Gas fired power plants



Transformer station

Cover for operation

CECR – Civil Engineering Completed Risks



- Cover for completed civil structures (e.g. bridges, tunnels)
- Name Peril cover
- Focus on Fire and NatCat

IDI Inherent Defects Insurance



- Cover for completed buildings
- Named Peril cover
- Focus on structural damage, collapse, treatment of collapse due to an inherent defect

Special covers



- Technological risks
- Offshore risks
- Cost overrun

Civil Engineering Completed Risks (CECR)

CECR Insurance

- Completed Civil Engineering Risks
- Low fire hazard assets/operations

Fire, IAR Insurance

- Non-Civil Eng operations or with high fire hazard e.g. completed buildings, industrial risks

CECR

- Hydropower/Dams (excl. equipment)
- Airport runways
- Roads, bridges & tunnels
- Railway lines/track
- Irrigation, Water & Sewer Systems
- Harbours, Weirs, Dry Docks
- Transportation & traffic systems

Fire, CMI/IAR, MB, EEQ

- Power equipment Turbine/Generator-sets
- Airports terminals
- Bus stations
- Train stations
- Water processing, treatment plants
- Container ports, depots, machinery
- Transportation & traffic systems

Named Perils Policy

- FLEXA
- Earthquake, tsunami
- Storm
- Flood and inundation
- Subsidence, landslide...
- Vandalism (of a single person)

Questions & Answers

05



Thank you for your attention!

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