Latch Hawk

Tripping pipe faster, safer

John Large, Salunda Limited

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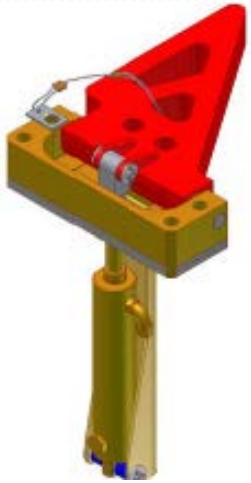
Tubular handling

"Automation of drill-floor machinery and tubular handling equipment has many advantages but introduce new hazards. Malfunction of such machinery and equipment has high potential for potential injury or fatality"

UK HSE offshore information sheet, no 3/2013

- Stand building & stand breakdown,
- Racking of pipe & casing,
- *Latch condition, malfunction, failure*



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Fingerboard feedback

Cf: "Fatality on drill floor", IADC Alert 15-10; "Tubular handling, recent findings", presentation by Aberdeen Drilling Consultants, DROPS forum 2015 & 2016

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Fingerboard latch monitor

- Prevent dropped pipe
  - Detect latch position
- Full latch feedback
  - Automated pipe handling
- Safety critical sensor
  - Easy installation
  - Retrofittable
- Suitable for MODU refits
  - Install in four simple steps
  - During scheduled NPT or SPS
- Supply agreement in place
  - Deliveries from 2015
  - Patented design & core tech

Latch Hawk

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Animation & video (click links)

Latch Hawk - https://vimeo.com/133977998

Daisy chain - https://vimeo.com/175732783

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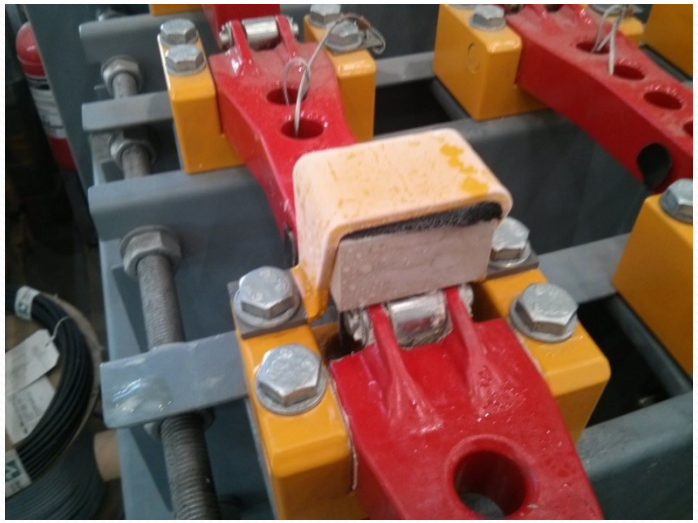
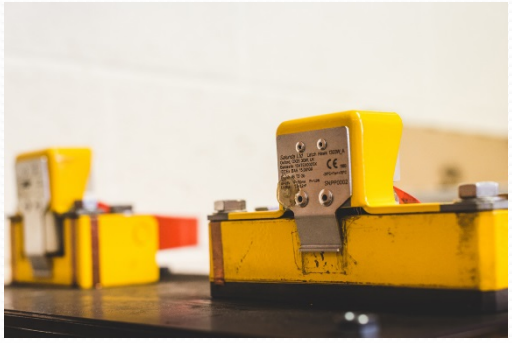
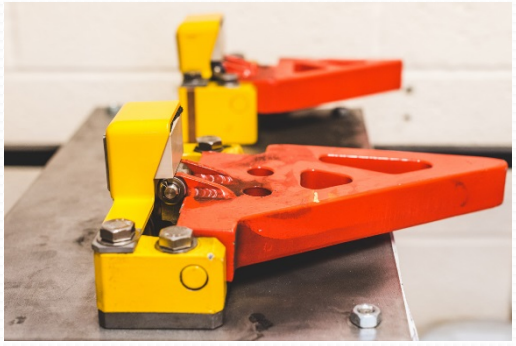
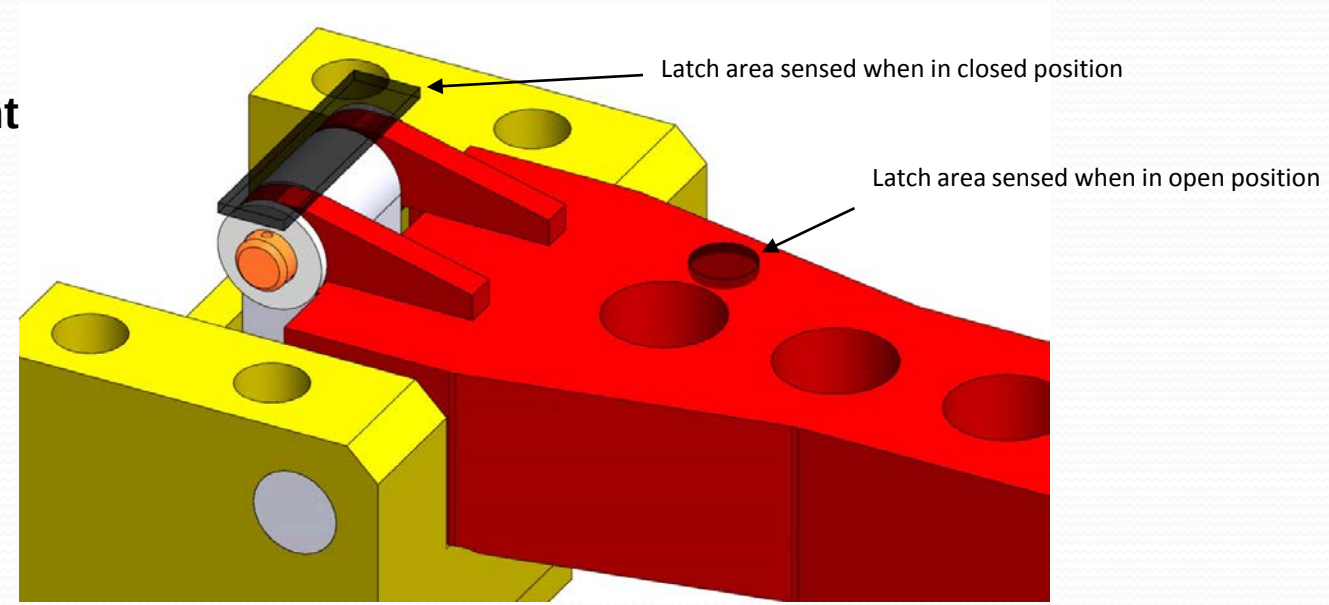
Ruggedized & certified

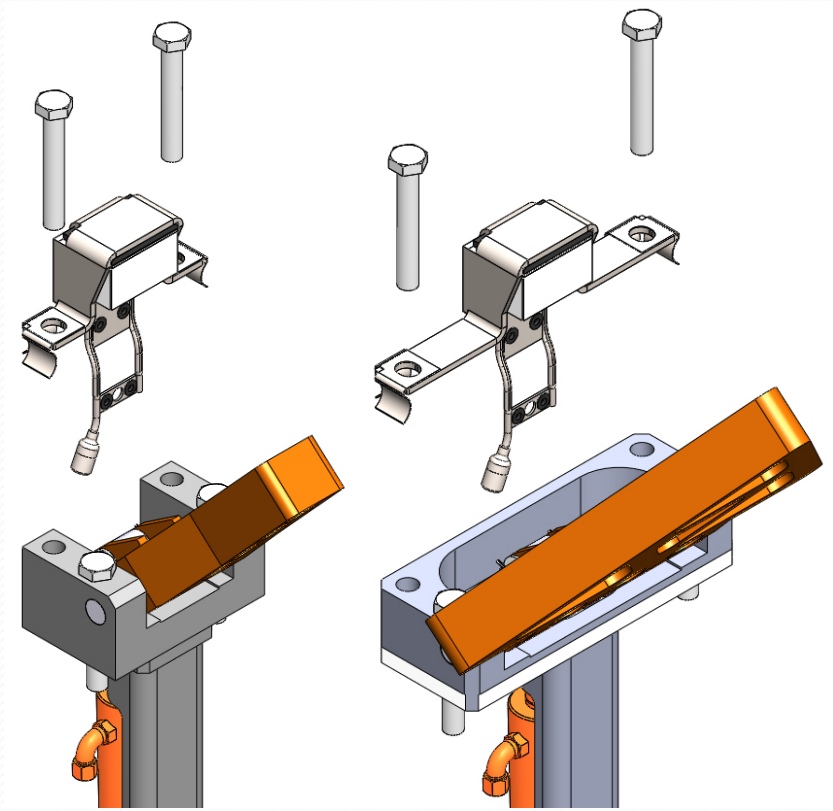



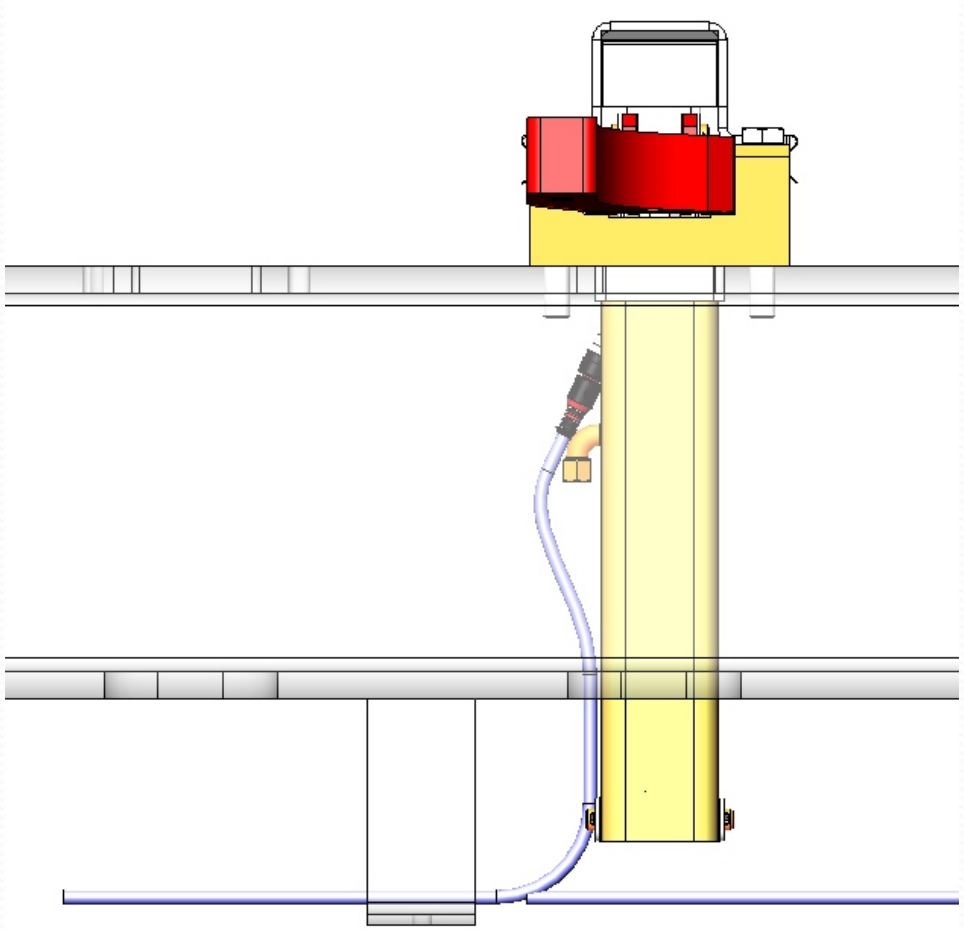
Latch position

- Sensor located to give a **direct**, positive reading
- **Confirm** both open, closed and in-between **positions**.
- **Does not rely on an inferred measurement**



Rapid installation





Fingerboard latch monitor

- Prevent dropped pipe
  - Detect & monitor latch behaviour
- Direct measurement of latch position
  - Solution compatible with latch variants
- Easy, rapid installation
  - Single, retrofittable part
- DNV, ATEX & IECEx certified
- Interfaces with existing infrastructure (4-20mA, Profibus)