

HPH 5000

hydraulic impact hammer

- Fast hammer blow rate for rapid pile penetration
- Full energy monitoring on screen
- Full history of hammer performance
- Highly reliable and robust electrical switching
- Intelligent stroke control
- Very few serviceable parts, with on screen fault diagnostics
- Easily maintained by Diesel / Mechanical fitter
- Cushion block irons out peak stresses
- Very efficient energy transfer

“the continued evolution of
digitally controlled
piling hammers”



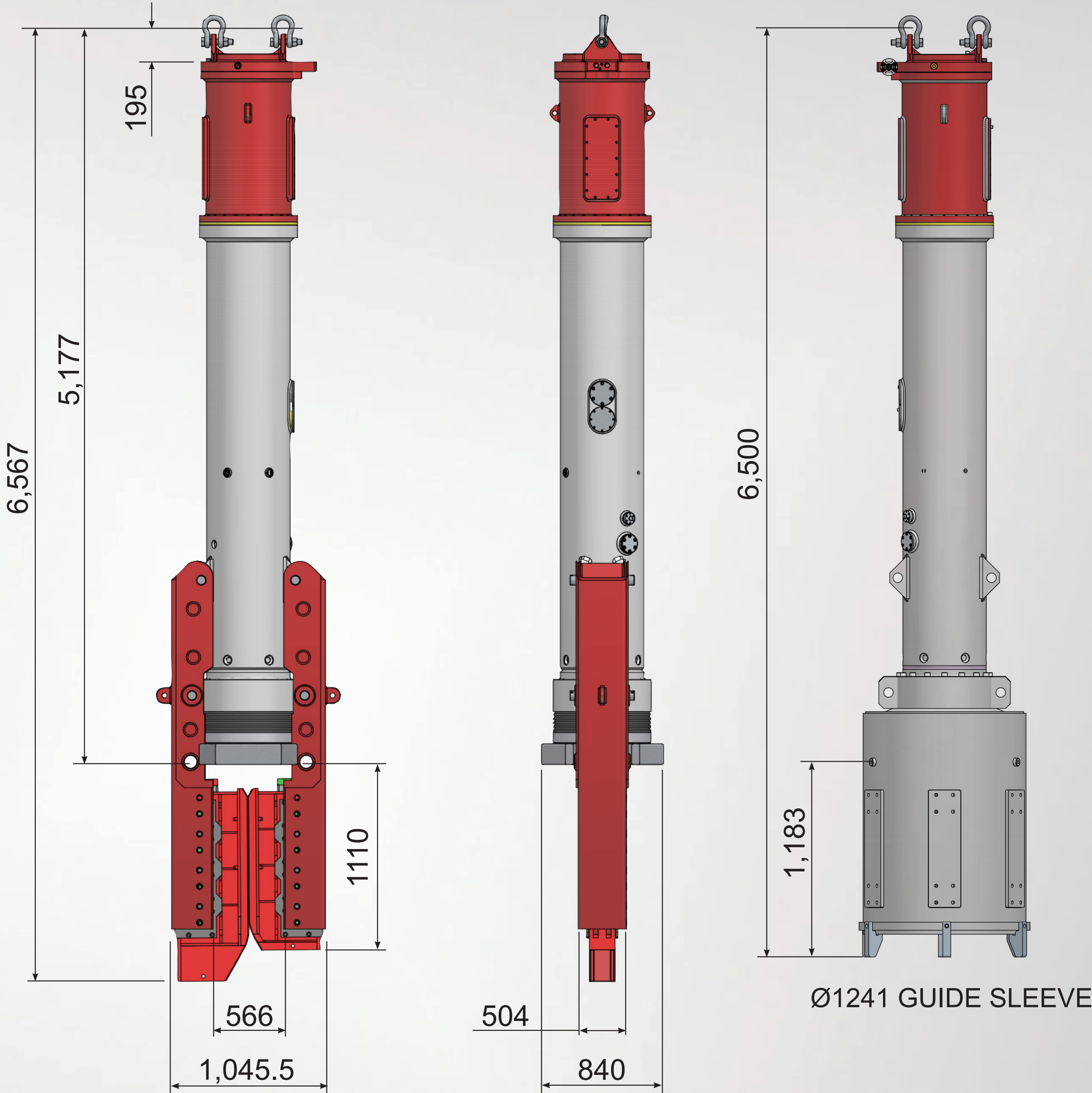
hydraulic impact hammer

HPH5000 HAMMER

| SPECIFICATION | UNITS | HPH5000 |
|--|-------|---------|
| RAM WEIGHT | kg | 4,068 |
| | lbs | 8968.5 |
| IMPACT VELOCITY | m/s | 5 |
| | ft/s | 16.36 |
| MAXIMUM ENERGY TRANSFERED TO PILE | kNm | 50.00 |
| | ft lb | 36,878 |
| MINIMUM ENERGY TRANSFERED TO PILE | kNm | 15.0 |
| | ft lb | 11,063 |
| BLOW RATE | bpm | 80-120 |
| LENGTH - LEAD MOUNTED | mm | 5,042 |
| | in | 198.5 |
| MINIMUM WIDTH OF BODY | mm | 635 |
| | in | 25 |
| WEIGHT - WITH SHEET PILE LEG GUIDES + SPREADER PLATE | kg | 11,000 |
| | lbs | 24,250 |

POWERPACK

| SPECIFICATION | UNITS | DAWSON |
|--------------------------------|---------------|--------------------|
| DIESEL ENGINE POWER | kW | 120 |
| | rpm | 2,100 |
| HYDRAULIC SYSTEM PRESSURE | bar | 250 |
| | psi | 3,625 |
| OIL FLOW RATE | L/min | 230 |
| SIZE - LENGTH x WIDTH x HEIGHT | m | 2.85 x 1.34 x 2.26 |
| | in | 112 x 53 x 89 |
| WEIGHT | kg | 3,200 |
| | lbs | 7,040 |
| FUEL CAPACITY | litres | 275 |
| FUEL CONSUMPTION @ 60% | litres / hour | 15.2 |



WITH LEG GUIDES THE HAMMER READILY FITS PAIRS OF MOST 'U' , 'Z' & H SHEET PILES WITH DIFFERENT INSERTS.



DATA CAN BE RECORDED TO A LAPTOP

digitally controlled drop weight

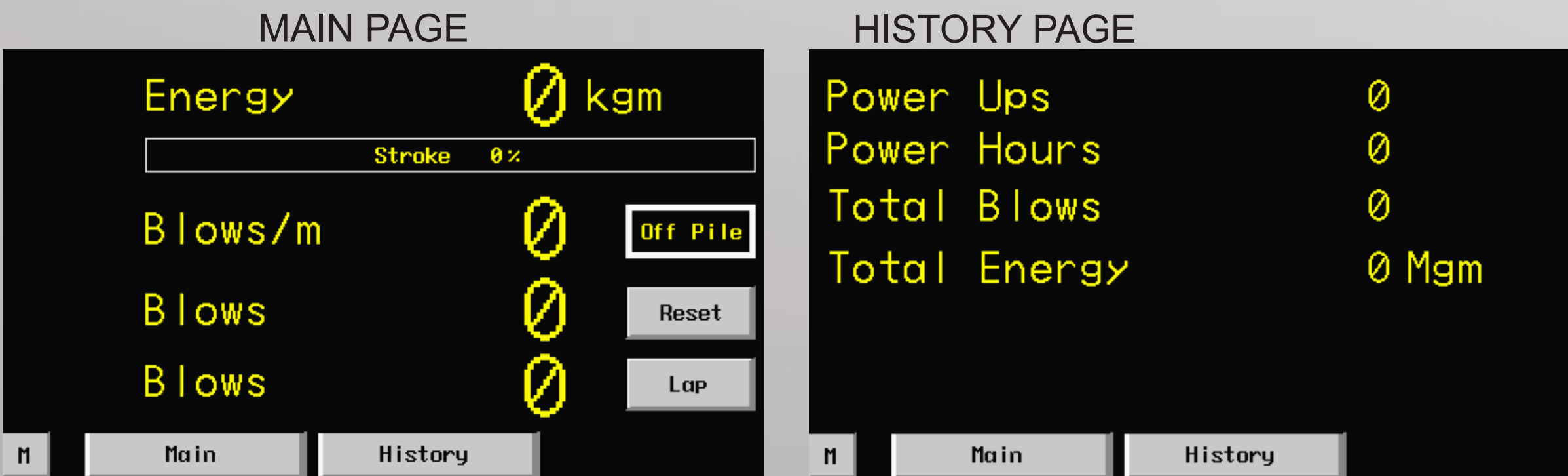
Dawson Construction Plant has developed an industry leading, robust and simple, electronic control system that **constantly** monitors the drop weight position. This constant monitoring allows the switching timing on the main hydraulic spool to be trended to continually optimise hammer performance throughout varying piling conditions, such as:

- 1 – Hard driving with pile recoiling
- 2 – Soft driving with a running pile
- 3 – Cold hydraulic oil on start up
- 4 – Raking piles



INTERFACE SCREEN MOUNTED ON POWER PACK

With constant drop weight position monitoring, the velocity of the drop weight is also known, therefore energy output can be accurately measured and is displayed to the operator on the powerpack interface screen. This information can be recorded direct to a laptop via a Dawson software interface, and can be saved in standard spreadsheet formats, giving a blow by blow account of every pile driven and a day to day productivity record.



TYPICAL SCREEN SHOTS

The main screen displays bar graphs showing hammer stroke & hydraulic oil temperature.

An Off Pile indicator confirms when the hammer is securely seated on the pile, and allows piling to commence.

There are numerical read outs showing blows per minute, energy per blow and total blows. The lower reading shows blows in LAP cycle. (Measuring blows per increment). The units can be changed from imperial to metric.

The history screen provides information on the total number of start ups / total hours / total blows and total energy through out the life of the hammer.