

По вопросам продаж и поддержки обращайтесь:

**Алматы** (7273)495-231  
**Ангарск** (3955)60-70-56  
**Архангельск** (8182)63-90-72  
**Астрахань** (8512)99-46-04  
**Барнаул** (3852)73-04-60  
**Белгород** (4722)40-23-64  
**Благовещенск** (4162)22-76-07  
**Брянск** (4832)59-03-52  
**Владивосток** (423)249-28-31  
**Владикавказ** (8672)28-90-48  
**Владимир** (4922)49-43-18  
**Волгоград** (844)278-03-48  
**Вологда** (8172)26-41-59  
**Воронеж** (473)204-51-73  
**Екатеринбург** (343)384-55-89  
**Иваново** (4932)77-34-06  
**Ижевск** (3412)26-03-58  
**Иркутск** (395)279-98-46  
**Казань** (843)206-01-48

**Калининград** (4012)72-03-81  
**Калуга** (4842)92-23-67  
**Кемерово** (3842)65-04-62  
**Киров** (8332)68-02-04  
**Коломна** (4966)23-41-49  
**Кострома** (4942)77-07-48  
**Краснодар** (861)203-40-90  
**Красноярск** (391)204-63-61  
**Курган** (3522)50-90-47  
**Курск** (4712)77-13-04  
**Липецк** (4742)52-20-81  
**Магнитогорск** (3519)55-03-13  
**Москва** (495)268-04-70  
**Мурманск** (8152)59-64-93  
**Набережные Челны** (8552)20-53-41  
**Нижний Новгород** (831)429-08-12  
**Новокузнецк** (3843)20-46-81  
**Новосибирск** (383)227-86-73  
**Ноябрьск** (3496)41-32-12

**Омск** (3812)21-46-40  
**Орел** (4862)44-53-42  
**Оренбург** (3532)37-68-04  
**Пенза** (8412)22-31-16  
**Пермь** (342)205-81-47  
**Петрозаводск** (8142)55-98-37  
**Псков** (8112)59-10-37  
**Ростов-на-Дону** (863)308-18-15  
**Рязань** (4912)46-61-64  
**Самара** (846)206-03-16  
**Санкт-Петербург** (812)309-46-40  
**Саранск** (8342)22-96-24  
**Саратов** (845)249-38-78  
**Севастополь** (8692)22-31-93  
**Симферополь** (3652)67-13-56  
**Смоленск** (4812)29-41-54  
**Сочи** (862)225-72-31  
**Ставрополь** (8652)20-65-13  
**Сургут** (3462)77-98-35

**Сыктывкар** (8212)25-95-17  
**Тамбов** (4752)50-40-97  
**Тверь** (4822)63-31-35  
**Тольятти** (8482)63-91-07  
**Томск** (3822)98-41-53  
**Тула** (4872)33-79-87  
**Тюмень** (3452)66-21-18  
**Улан-Удэ** (3012)59-97-51  
**Ульяновск** (8422)24-23-59  
**Уфа** (347)229-48-12  
**Хабаровск** (4212)92-98-04  
**Чебоксары** (8352)28-53-07  
**Челябинск** (351)202-03-61  
**Череповец** (8202)49-02-64  
**Чита** (3022)38-34-83  
**Якутск** (4112)23-90-97  
**Ярославль** (4852)69-52-93

**Россия** +7(495)268-04-70

**Казахстан** +7(7172)727-132

**Киргизия** +996(312)96-26-47

**сайт: [www.honeywell.nt-rt.ru](http://www.honeywell.nt-rt.ru) || эл. почта: [hwn@nt-rt.ru](mailto:hwn@nt-rt.ru)**

## ПРОГРАММЫ

Технические характеристики  
на MXProLine

## Case Study

### Apeldoorn Flexible Packaging BV, Netherlands Uses Honeywell's HC900, Experion HS and MXProLine to Improve Stretch Foil Quality



#### Introduction

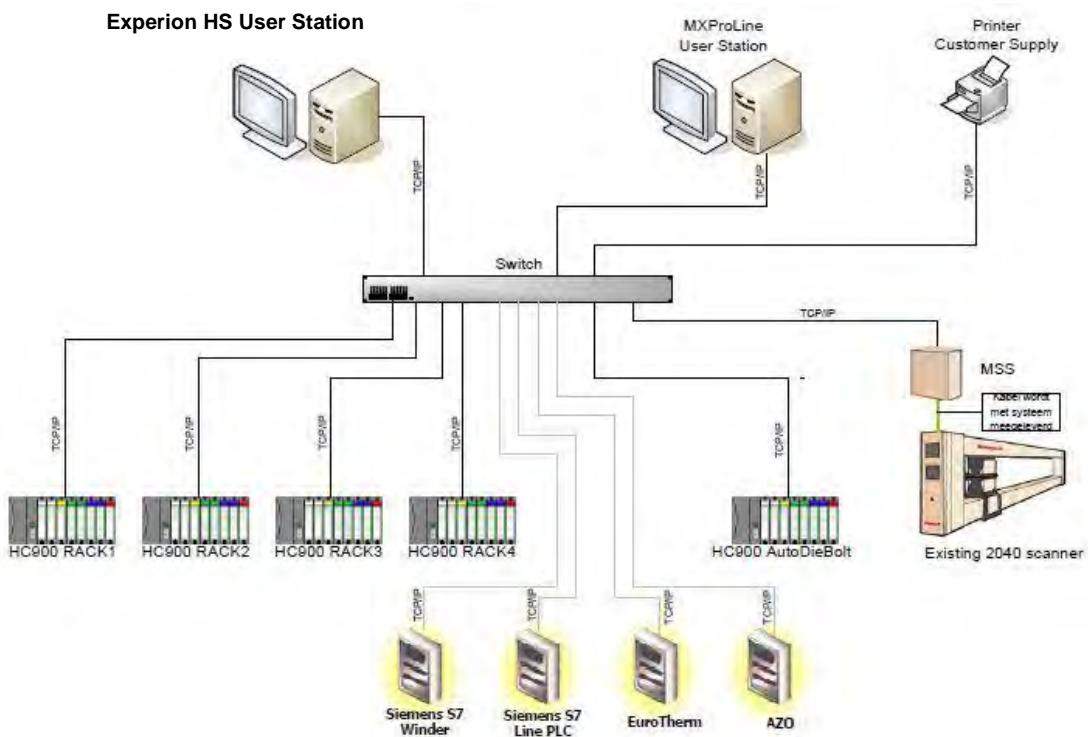
At Apeldoorn Flexible packaging (AFP), Netherlands the existing extruder line has been upgraded to a 5 extruder multilayer line, to produce the highest quality stretch foil. With Honeywell as their supplier of temperature control, QCS and SCADA system, the upgrade was completed at the end of 2008.

AFP, an ISO 9001-2008 company is also one of the first packaging companies to obtain BRC-lop. Quality awareness is deeply embedded in the organisation and serves as a constant guideline for their operations. The company is the [winner of the 23rd DuPont Award](#) for packaging solutions.

The Honeywell equipment at AFP comprises of three main sections working together as one seamless system:

- HC900 Racks
- Experion HS
- MXProLine QCS

Figure 1: System Overview

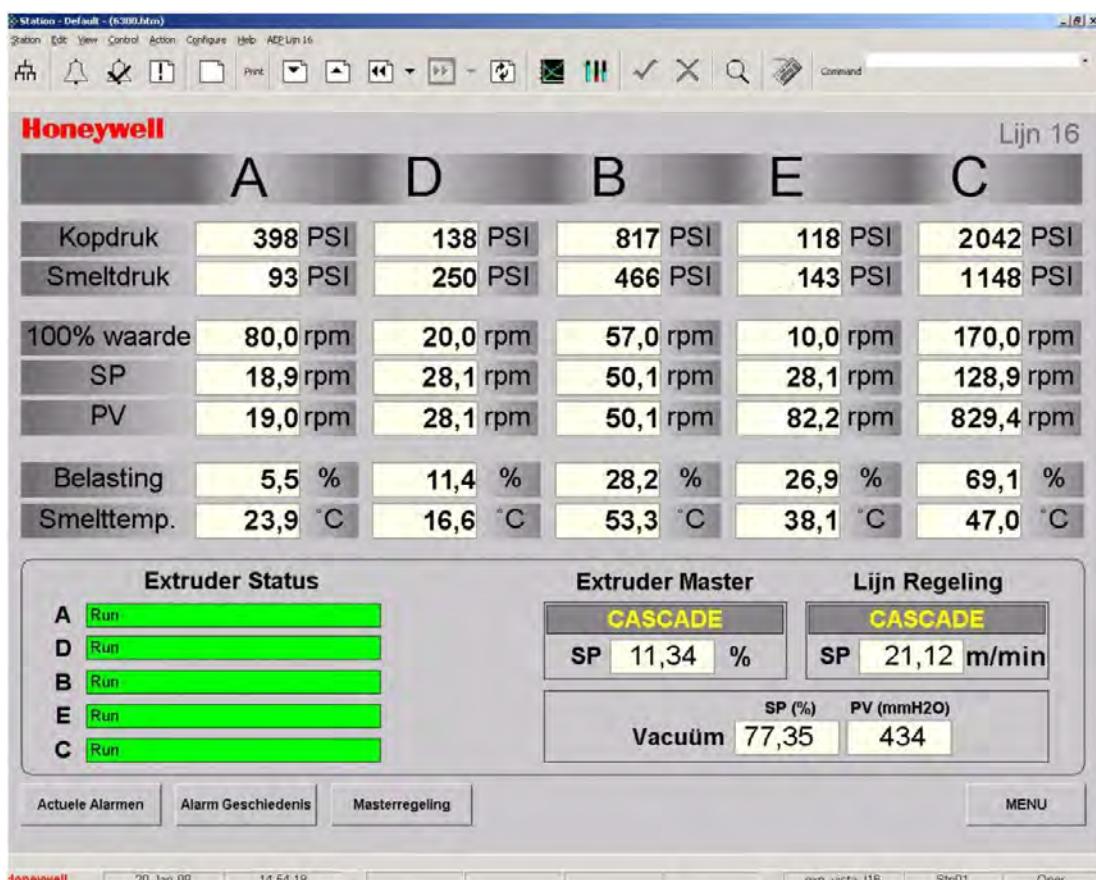


## HC900 Racks

There are 4x 8-module HC900 racks installed (all with C70 controllers). The configuration of those HC900 racks can be divided into 3 functionalities:

- **Temperature controls:** All temperature zones of the 5 extruders, adapter, die and chillrolls are measured through thermocouple or PT100 units and are connected directly to the HC900. These zones are controlled by digital outputs - some heat-only and some heat-cool. The controls are tuned via the auto-tune function in HC900.
- **Communication with existing equipment:** Linespeed and masterspeed are done in existing Siemens and Eurotherm. All data is transferred via the HC900, using the TCP/IP Modbus protocol, to the SCADA system.
- **Communication with MXProLine QCS:** All temperature recipes reside in MXProLine. Standard communication is done via TCP/IP Modbus protocol.

Figure 2: Main Display



## Experion HS

Experion HS is used as the main operator interface for operating the complete line. All temperature loops, extruder speeds, master speed, and linespeed are operated from this system. This system communicates with the HC900 racks. The system has a main menu, with all important data and from that menu, the operator can select the part of the line to get more detailed data and trends.

The graphic displays with color codes help the operator to read and interpret the information more efficiently.

Figure 3: Temperature Zone Overview

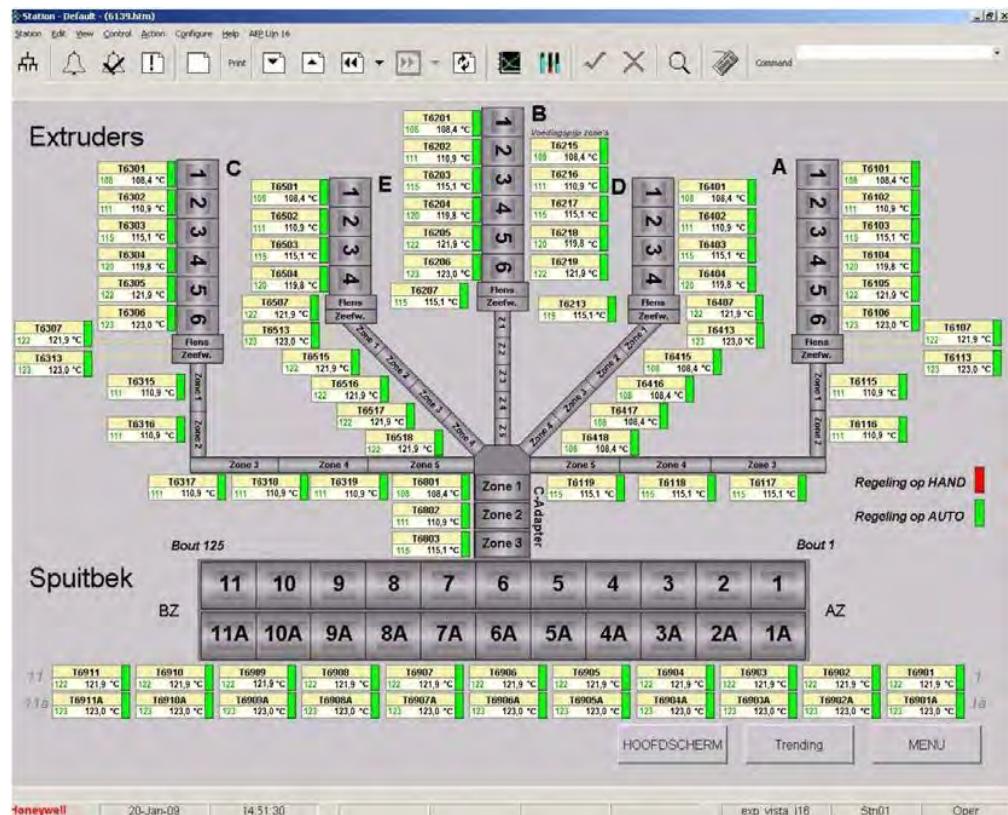
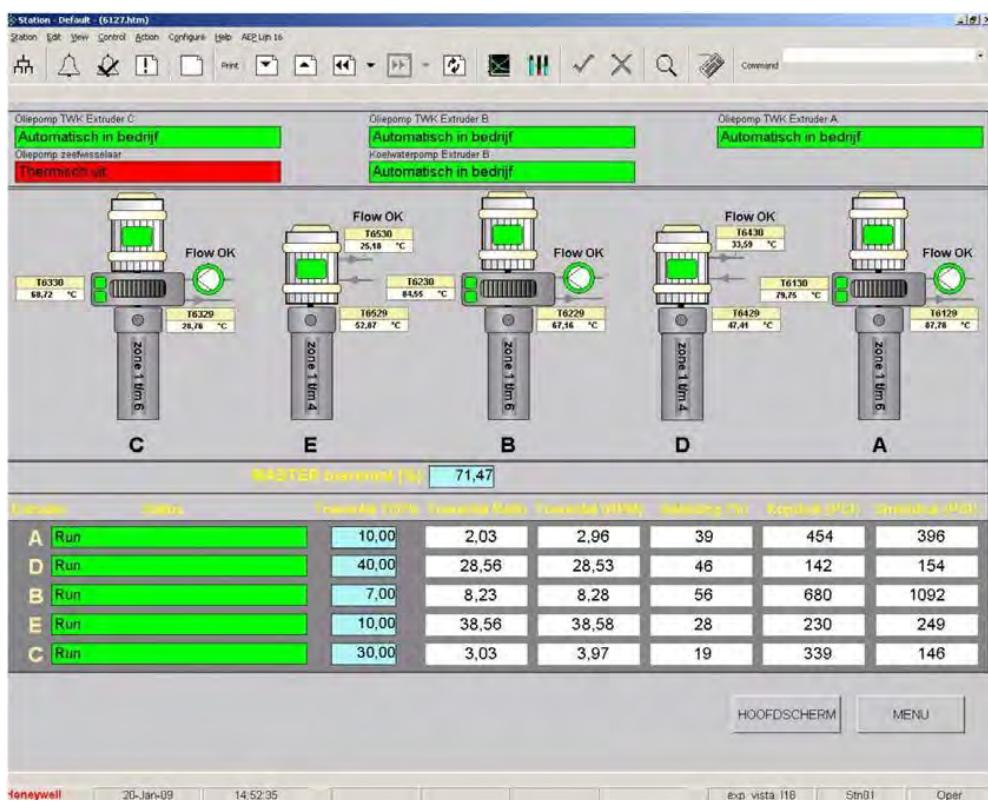
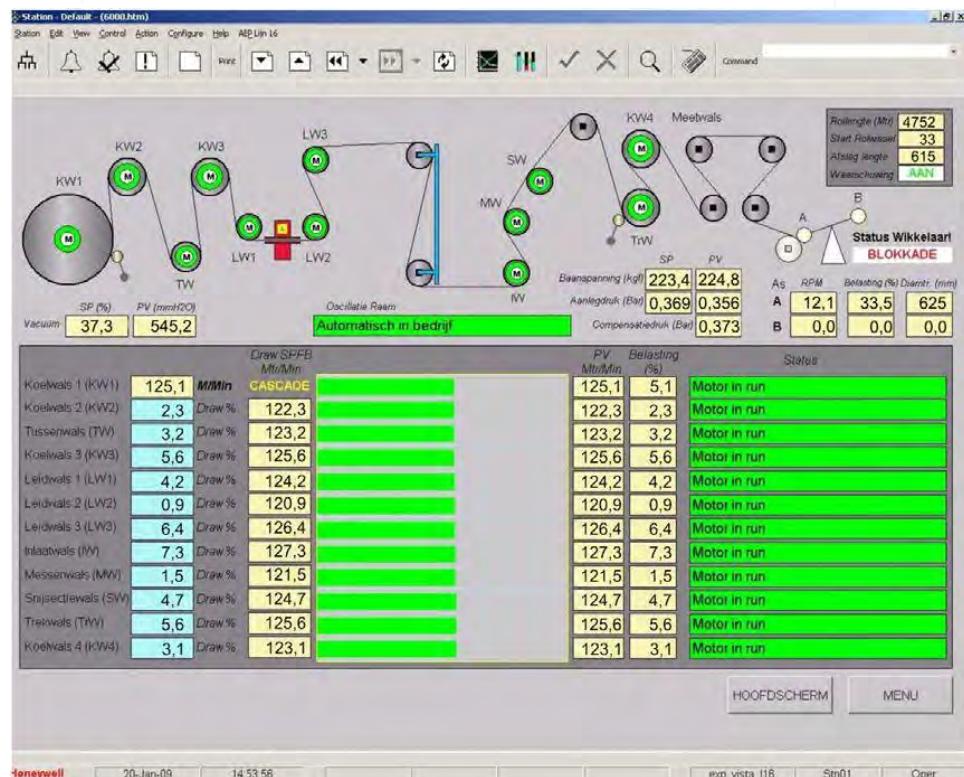


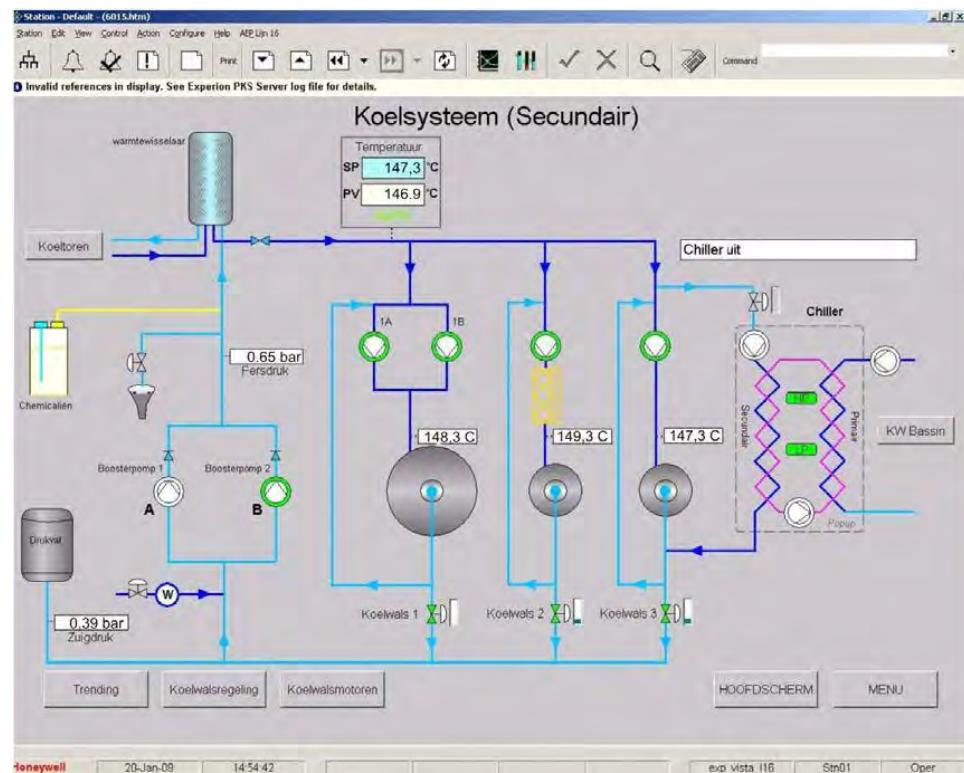
Figure 4: Extruder Speeds



**Figure 5: Linespeeds with Draw Entries**



**Figure 6: Chiller Control**



По вопросам продаж и поддержки обращайтесь:

**Алматы** (7273)495-231  
**Ангарск** (3955)60-70-56  
**Архангельск** (8182)63-90-72  
**Астрахань** (8512)99-46-04  
**Барнаул** (3852)73-04-60  
**Белгород** (4722)40-23-64  
**Благовещенск** (4162)22-76-07  
**Брянск** (4832)59-03-52  
**Владивосток** (423)249-28-31  
**Владикавказ** (8672)28-90-48  
**Владимир** (4922)49-43-18  
**Волгоград** (844)278-03-48  
**Вологда** (8172)26-41-59  
**Воронеж** (473)204-51-73  
**Екатеринбург** (343)384-55-89  
**Иваново** (4932)77-34-06  
**Ижевск** (3412)26-03-58  
**Иркутск** (395)279-98-46  
**Казань** (843)206-01-48

**Калининград** (4012)72-03-81  
**Калуга** (4842)92-23-67  
**Кемерово** (3842)65-04-62  
**Киров** (8332)68-02-04  
**Коломна** (4966)23-41-49  
**Кострома** (4942)77-07-48  
**Краснодар** (861)203-40-90  
**Красноярск** (391)204-63-61  
**Курган** (3522)50-90-47  
**Курск** (4712)77-13-04  
**Липецк** (4742)52-20-81  
**Магнитогорск** (3519)55-03-13  
**Москва** (495)268-04-70  
**Мурманск** (8152)59-64-93  
**Набережные Челны** (8552)20-53-41  
**Нижний Новгород** (831)429-08-12  
**Новокузнецк** (3843)20-46-81  
**Новосибирск** (383)227-86-73  
**Ноябрьск** (3496)41-32-12

**Омск** (3812)21-46-40  
**Орел** (4862)44-53-42  
**Оренбург** (3532)37-68-04  
**Пенза** (8412)22-31-16  
**Пермь** (342)205-81-47  
**Петрозаводск** (8142)55-98-37  
**Псков** (8112)59-10-37  
**Ростов-на-Дону** (863)308-18-15  
**Рязань** (4912)46-61-64  
**Самара** (846)206-03-16  
**Санкт-Петербург** (812)309-46-40  
**Саранск** (8342)22-96-24  
**Саратов** (845)249-38-78  
**Севастополь** (8692)22-31-93  
**Симферополь** (3652)67-13-56  
**Смоленск** (4812)29-41-54  
**Сочи** (862)225-72-31  
**Ставрополь** (8652)20-65-13  
**Сургут** (3462)77-98-35

**Сыктывкар** (8212)25-95-17  
**Тамбов** (4752)50-40-97  
**Тверь** (4822)63-31-35  
**Тольятти** (8482)63-91-07  
**Томск** (3822)98-41-53  
**Тула** (4872)33-79-87  
**Тюмень** (3452)66-21-18  
**Улан-Удэ** (3012)59-97-51  
**Ульяновск** (8422)24-23-59  
**Уфа** (347)229-48-12  
**Хабаровск** (4212)92-98-04  
**Чебоксары** (8352)28-53-07  
**Челябинск** (351)202-03-61  
**Череповец** (8202)49-02-64  
**Чита** (3022)38-34-83  
**Якутск** (4112)23-90-97  
**Ярославль** (4852)69-52-93

**Россия** +7(495)268-04-70

**Казахстан** +7(7172)727-132

**Киргизия** +996(312)96-26-47

**сайт:** [www.honeywell.nt-rt.ru](http://www.honeywell.nt-rt.ru) || **эл. почта:** [hwn@nt-rt.ru](mailto:hwn@nt-rt.ru)